

Board of Education Meeting

Wednesday, July 10, 2024 7:00 PM

BOE Auditorium and via Zoom Meeting Platform, 129 Church Street, Bristol, CT 06010

1. **CALL TO ORDER and THE PLEDGE OF ALLEGIANCE**

2. **APPROVAL OF MINUTES**

3. **COMMITTEE REPORTS**

4. **CHAIR REPORT**

5. **SUPERINTENDENT REPORT**

6. **CONSENT AGENDA**

6.1. PERSONNEL

6.1.a. Administrative Resignations

6.1.b. Teacher Retirement - Effective June 30,
2024

6.1.c. Teacher Resignations - Effective June 19,
2024

6.1.d. New Teacher Hires - Effective August 26,
2024

6.1.e. A-1 Resignation

6.1.f. Teacher Request for an Unpaid Leave of
Absence

7. **PUBLIC COMMENT**

8. **DELIBERATED ITEMS/DISTRICT LEADERSHIP TEAM
REPORTS**

8.1. ED-099 Authorized Signatures Change Form

8.2. Approval of the Phase 2 Final plans and Project
Manuals for the Northeast MS Project

8.3. Approval of Board of Education Equity Statement
for the Sustainable CT Action Program
Application.

8.4. Water Meter/Main Replacement at the BoE
Building

8.5. Proposed Start and End Times for the 2024 -
2025 School Year

8.6. Donation of Artwork to BAIMS and the Rockwell
Theater

8.7. End of the Spring Season Report

8.8. Talent Management Report

8.9. Special Services Report

9. **CURRICULUM REVISION**

9.1. K-12 Library Media Curriculum - Second Reading

9.2. Botany Curriculum Revision - Second Reading

9.3. Communication Technology - Curriculum Revision
- Second Reading

9.4. CAD & Solid Modeling Curriculum Revision -
Second Reading

9.5. Child, Family and Community Curriculum Revision

9.6. ECE Environmental Science Curriculum Revision -
Second Reading

9.7. Oceanography Curriculum Revision - Second
Reading

9.8. Website Design Curriculum Revision - Second
Reading

10. **NEW BUSINESS**

11. **BUILDING REPORTS**

12. **INFORMATION/LIAISON REPORTS**

13. **ADJOURNMENT**

BRISTOL BOARD OF EDUCATION
Bristol, Connecticut
Wednesday, November 8, 2023 – 7:45 p.m.
Special Meeting – Executive Session

A Special Bristol Board of Education meeting was held on Wednesday, November 8, 2023, at 7:45 p.m. in Room 36 of the Bristol Board of Education, located at 129 Church Street, Bristol, Connecticut,

PRESENT: Commissioners: Russell Anderson, Eric Carlson, Jennifer Dube, Jill Fitzsimons-Bula, Kristen Giantonio, Lorianne Osenkowski, Shelby Pons, Maria Simmons and Dante Tagariello

ALSO PRESENT: Attorney, Jessica Ritter, Shipman & Goodwin

1. CALL TO ORDER/PLEDGE OF ALLEGIANCE/MEETING NORMS

The Special Meeting was called to order at 7:45 p.m.

2. VOTE TO CONVENE INTO EXECUTIVE SESSION *for the purpose of a:*

- a. Discussion concerning the Superintendent's Contract
- b. Possible action concerning the Superintendent's Contract

Discussion:

Commissioners discussed the Superintendent's Contract.

3. VOTE TO RECONVENE INTO PUBLIC SESSION *to vote on any items from the executive session*

4. ADJOURNMENT

There being no other business, the meeting should be adjourned. (9:00 p.m.)

Respectfully Submitted,
Dante Tagariello
Dante Tagariello
Bristol Board of Education Secretary

BRISTOL BOARD OF EDUCATION
Bristol, Connecticut
Tuesday, March 5, 2024 – 6:00 p.m.
Special Meeting – Executive Session

A Special Bristol Board of Education meeting was held on Tuesday, March 5, 2024, at 6:00 p.m. in Room 36 of the Bristol Board of Education, located at 129 Church Street, Bristol, Connecticut.

PRESENT: Commissioners: Russell Anderson (via phone), Jill Fitzsimons-Bula, Kristen Giantonio, Lorianne Osenkowski, Shelby Pons, Maria Simmons, Dante Tagariello and Jennifer Van Gorder

EXCUSED: Commissioner: Eric Carlson

1. CALL TO ORDER

The meeting was called to order at 6:06 p.m.

2. VOTE TO CONVENE INTO EXECUTIVE SESSION *for the purpose of:*

1. Approval of November 8, 2023 Executive Session Minutes
2. Approval of February 7, 2024 Executive Session Minutes
3. Superintendent's Evaluation - Mid-Year 23-24

On a motion by Shelby Pons and seconded by Lorianne Osenkowski;

Items 1 and 2 were skipped and commissioners moved to Item 3.

3. Superintendent's Evaluation - Mid-Year 23-24

Commissioners conducted the Superintendent's evaluation.

4. VOTE TO RECONVENE INTO PUBLIC SESSION *to vote on any items from the executive session.*

On a motion by Lorianne Osenkowski, seconded by Shelby Pons

Commissioners voted to reconvene into public session to vote on any items from the Executive Session.

5. ADJOURNMENT

There being no other business, the meeting should be adjourned. (8:42 p.m.)

Respectfully Submitted,
Jill Fitzsimons-Bula
Jill Fitzsimons-Bula
Bristol Board of Education Secretary

BRISTOL BOARD OF EDUCATION
Bristol, Connecticut
Thursday, April 25, 2024 – 7:00 p.m.
Special Meeting – Executive Session

A Special Bristol Board of Education meeting was held on Thursday, April 25, 2024, at 7:00 p.m. in Room 36 of the Bristol Board of Education, located at 129 Church Street, Bristol, Connecticut.

PRESENT: Commissioners: Eric Carlson, Jill Fitzsimmons-Bula, Kristen Giantonio, Lorianne Osenkowski, Shelby Pons, Maria Simmons, Dante Tagariello and Jennifer Van Gorder

ALSO PRESENT: Attorney Thomas Mooney, Shipman & Goodwin, Dr. Catherine Carbone (via telephone) and Attorney Ogles (via telephone)

1. CALL TO ORDER

The meeting was called to order at 7:00 p.m.

2. VOTE TO CONVENE INTO EXECUTIVE SESSION

On a motion by Eric Carlson, seconded by Dante Tagariello,

Commissioners voted unanimously to Convene into Executive Session *for the purpose of:* Discussion and Possible Action on an Employee Contractual Matter.

Discussion:

Commissioners discussed an Employee Contractual Matter.

3. VOTE TO RECONVENE INTO PUBLIC SESSION *to vote on any items from Executive Session*

On a motion by Dante Tagariello, seconded by Eric Carlson

Commissioners voted to reconvene into open session to vote on any items from the executive session.

On a motion by Shelby Pons, seconded by Eric Carlson

Commissioners voted unanimously to accept the Separation.

4. ADJOURNMENT

There being no other business, the meeting should be adjourned. (9:32 p.m.)

Respectfully Submitted,

Jill Fitzsimmons-Bula

Jill Fitzsimmons-Bula

Bristol Board of Education Secretary

BRISTOL BOARD OF EDUCATION
Bristol, Connecticut
Tuesday, May 14, 2024 – 7:00 p.m.
Special Meeting – Executive Session

A Special Bristol Board of Education meeting was held for an Executive Session on Tuesday, May 14, 2024, at 7:00 p.m. in Room 36 of the Bristol Board of Education, located at 129 Church Street, Bristol, Connecticut.

PRESENT: Commissioners: Russell Anderson, Eric Carlson, Jill Fitzsimons-Bula, Kristen Giantonio, Lorianne Osenkowski, Shelby Pons, Maria Simmons, Dante Tagariello and Jennifer Van Gorder

ALSO PRESENT: Attorney Thomas Mooney, Shipman & Goodwin

1. CALL TO ORDER

The meeting was called to order at 7:00 p.m.

2. VOTE TO CONVENE INTO EXECUTIVE SESSION *for the purpose of discussing:*

1. Discussion and possible action regarding (1) status of a confidential attorney-client communication regarding an investigation, and (2) elimination of positions and related revision of the Board budget for 2024-2025.
2. Discussion and possible action concerning proposed employment contract with Acting Superintendent.
3. Discussion concerning the performance of individual Board members, facilitated by Attorney Thomas Mooney.

On a motion by Dante Tagariello, seconded by Eric Carlson

Commissioners voted unanimously to Convene into Executive Session.

3. EXECUTIVE SESSION

1. Discussion regarding the status of a confidential attorney-client communication regarding an investigation.
2. Discussion regarding the procedure for the elimination of positions.
3. Discussion regarding possible action concerning the proposed employment contract with Acting Superintendent.

4. VOTE TO RECONVENE INTO PUBLIC SESSION *to vote on any items from the executive session*

On a motion by Dante Tagariello, seconded by Eric Carlson

Commissioners voted unanimously to reconvene into open session to vote on any items from the executive session.

5. PUBLIC SESSION

On a motion by Dante Tagariello, seconded by Eric Carlson

Commissioners voted to approve the proposed contract between the Superintendent.

Following discussion, commissioners voted to amend the contract date to end mid-January.

Following a Roll Call Vote, four (4) commissioners (Giantonio, Anderson, Van Gorder, and Osenkowski) in favor of the motion and five (5) commissioners (Carlson, Pons, Simmons, Tagariello, and Fitzsimmons-Bula) opposed. The motion **FAILED**.

Following discussion, commissioners voted to amend the Evaluation to include LEAD.

Following a Roll Call Vote, six (6) commissioners (Anderson, Carlson, Pons, Simmons, Tagariello, and Fitzsimmons-Bula) in favor of the motion and three (3) commissioners (Giantonio, Van Gorder, and Osenkowski) opposed. The motion **PASSED**.

On a motion by Dante Tagariello, seconded by Eric Carlson

Commissioners voted to eliminate the position of Executive Director of Communications.

Following discussion, and

Following a Roll Call Vote, five (5) commissioners (Carlson, Pons, Simmons, Tagariello, and Fitzsimmons-Bula) in favor of the motion and four (4) commissioners (Giantonio, Anderson, Van Gorder, and Osenkowski) opposed. The motion **PASSED**.

6. ADJOURNMENT

There being no other business, the meeting should be adjourned.

Respectfully Submitted,

Jill Fitzsimmons-Bula

Jill Fitzsimmons-Bula

Bristol Board of Education Secretary

The minutes presented within this document are a summary of the discussion that took place at the Board of Education meeting. To view the meeting in its entirety and hear full reports please click the following link: [June 5, 2024 Regular Meeting Recording](#).

BRISTOL BOARD OF EDUCATION
Bristol, Connecticut
Wednesday, June 5, 2024 – 7:00 p.m.
Regular Meeting Minutes

The Bristol Board of Education regular meeting was held on Wednesday, June 5, 2024, at 7:00 p.m. in the Bristol Board of Education Auditorium located at 129 Church Street and via the Zoom Meeting Platform.

PRESENT: Commissioners: Russell Anderson, Jill Fitzsimons-Bula, Eric Carlson, Kristen Giantonio, Lorianne Osenkowski, Maria Simmons, Jennifer Van Gorder and Chair Shelby Pons (Virtual)

ALSO PRESENT: Iris White, Acting Superintendent, Dr. Michael Dietter, Deputy Superintendent, Lynn Boisvert, Director of Finance and Erick Rosengren, Board Council Liaison

ABSENT: Commissioner Dante Tagariello

1. CALL TO ORDER/ PLEDGE OF ALLEGIANCE/MOMENT OF SILENCE

Vice Chair Maria Simmons called the meeting to order at 7:01 p.m. and asked the audience to stand for the Pledge of Allegiance. Vice Chair Simmons asked the audience to join her in a moment of silence for Patricia Coley a Special Education Teacher at Mountain View and Bristol Eastern from 9/6/77 to 6/30/11; and Marilyn Resnick a Grade 1 Teacher, an English Teacher, and a Development Reading Teacher at the Callen School and Memorial Boulevard M.S. from 1973-2003.

2. STAFF AND STUDENT RECOGNITION - The Board recognized the following staff and students:

1. Bristol Central and Bristol Eastern – AVID Seniors Updates
2. BCHS Latin Student Accolades
3. BoE Senior Student Representatives – Isabel Paolino (BCHS) and Rita Gao (BEHS)
4. 2025 Paraeducator of the Year – David Friedman – Bristol Central High School
5. 2025 Teacher of the Year – Anne Tacinelli – Greene–Hills School

3. APPROVAL OF MINUTES

May 1, 2024 - Special Meeting - Meet & Greet Minutes

On a motion by Eric Carlson, seconded by Kristen Giantonio and

Following a roll call vote, the Board of Education voted unanimously to approve the May 1, 2024 – Special Meeting - Meet & Greet Minutes as written. Commissioner Fitzsimons-Bula Abstained.

May 1, 2024 - Regular BoE Meeting Minutes

On a motion by Eric Carlson, seconded by Kristen Giantonio and

Following a roll call vote, the Board of Education voted unanimously to approve the May 1, 2024 – Regular Meeting Minutes as written.

Discussion followed regarding the May 14, 2024, Executive Session minutes not being listed for approval, adequate notification of Special Meetings, and the practice of having Public Comment on all Special Meetings agendas.

4. COMMITTEE REPORTS

Finance and Operations Committee

Commissioner Carlson reported that the committee met earlier this evening. He arrived late to the meeting and he did not chair it. All items were tabled as they were more discussion items and the committee will be putting those off until a future meeting so the next regularly scheduled meeting will see these items.

Policy Committee

Commissioner Fitzsimons-Bula reported that the committee met on May 22nd and had robust discussions. The committee learned more information about cheer competition uniforms; how many teams within the CCC have one competition uniform versus practice, game and competition uniform. The committee discussed bylaws and conversation around a potential schedule; creating a schedule to review them regularly is still in the works and further discussion is needed. School climate policy was discussed as was Bylaw 9326 - Minutes, Taping, Broadcasting and Policy - 2141 Recruitment and Appointment of the Superintendent. The last two agenda items will be coming back on our next policy committee meeting for further discussion.

School, Family, and Community Partnerships Committee

Commissioner Simmons reported that the School, Family, and Community Partnerships committee met on May 22nd. They started the meeting by activating well-being which is a way to support relational practices and connect with one another in a less transactional way. They discussed community conversations and the potential of bringing in community voice and how that would impact the work of the School, Family, and Community Partnerships committee knowing that each community member has something important to contribute and how we might engage community members, members of the school community, members of the community at large, students, parents, etc. no resolution there, but just really starting to open that up for conversation. They discussed School, Family, and Community Partnerships Committee expansion, looking at the committee and the potential for expanding the committee beyond just the board members so looking at student representatives, PTA representatives, parent representatives, and staff representatives, really making sure that we have diversity in the voice and representation; also no resolution, just conversational. The committee also looked at tardy reporting for district transportation and district practices in the way that it assigns absences or tardies based on district transportation challenges that is been something discussed widely throughout the district and we wanted to look at potential policy which is a task for another committee but again looking at how we can create partnerships to ensure that students across all schools in Bristol have an equal application of practice.

Student Achievement and Outcomes Committee

Commissioner Fitzsimons-Bula reported that the Student Achievement and Outcomes committee met on May 15th and they were presented three informational items: Real Impact Initiative Partners for Educational Leadership, Student Outcome Data, 5-Year Smarter Balanced Peer Assessment and they received an ESSER/ARP update. The committee also had three curriculum revision presentations that were moved to the full board which commissioners will learn more about later this evening, they include Modern American History, Emergency Medical Response, and Algebra and Algebra 1 Grade 8 Revision.

Lynn Boisvert informed Commissioner Simmons that the Budget must be voted on this evening. The budget and either set of proposed changes will need to be approved. If not approved this evening, a special meeting will need to be held before June 30th.

Labor Relations Committee

Commissioner Carlson reported that the committee continues to meet with the unions; Locals 818, 3551, and 2267.

5. STUDENT REPRESENTATIVE REPORTS

Bristol Central High School

BCHS Junior Student Representative, Abigail Wasta reported on Bristol Central High School activities. Highlights from her May report included a sports team wrap-up and numerous sports accolades. Juniors and seniors had a great time at prom this year, they were both successful and fun events. Before prom, students watched the mock accident that was put together by the Bristol Fire Department, Police Department, EMS and BC performing art students. Thank you for putting this together and for teaching our students to be safe and make smart decisions. Many of the Latin students had a great time at CT Latin Day playing games, dressing up, enjoying great food and learning a lot about the culture. South Side Scholars graduated from the Italian program in addition the annual Italian Car Show made its way back to BCHS, students were able to see, sit in and ask questions about the Italian culture. Performing Arts put on a wonderful show in the spring performance. The Jazz Band, Percussion Ensemble and Concert Band performed and were amazing. Madrigals, BC Flats, and Concert Choir performed at the spring Coral concert. Congratulations to all our Juniors and seniors who were inducted into the National Honors Society. The senior NHS officers and advisors put together a beautiful ceremony to welcome the new inductees. Bristol Central hosted a successful Awards night this past month Freshmen received excellence awards, Juniors received book awards and the seniors received scholarships for next year. We are especially proud of Isabel Paolino and Olivia Norrie who were named Valedictorian and Salutatorian at awards night.

Bristol Eastern High School

BEHS Junior Student Representative, Peyton Troth reported on sporting events and activities as well as updates on academics and extracurriculars at Bristol Eastern High School. Highlights from her report included the recently held sports banquet and the academic and scholarship awards ceremony; Mental Health Awareness Day, students and teachers participated in events and activities that focused on different elements of mental health; therapy dogs were in attendance as well as firefighters and a speaker who spoke about his battles with anxiety and depression; seniors are focusing on all the final details before graduation; underclassmen are preparing for finals and next year's schedule; the annual walk week was held this week allows students and teachers to de-stress by having each class get a chance to go outside and walk the track. Seniors recently had their senior beach life prank and it was great to see all the seniors come together for their last celebrations.

6. CHAIR REPORT

No Chair Report was given this evening.

7. SUPERINTENDENT REPORT

Iris White, Acting Superintendent provided an update on the following topics:

1. Student and Staff Recognition
2. Central Office Town Hall
3. School Visits
4. Strategic School Reviews
5. Learner Engagement and Attendance Program (LEAP)

8. CONSENT AGENDA

Vice Chair Maria Simmons called for a motion to approve the Consent Agenda which included Items 8.1.a through 8.1.e.

On a motion by Jennifer Van Gorder, seconded by Eric Carlson and

Following a roll call vote, the Board of Education voted unanimously to approve the Consent Agenda as presented.

8.1. PERSONNEL

8.1.a. Administrative Request for Sabbatical Leave of Absence

Carbone, Catherine - BOE - Superintendent of Schools - Effective May 16, 2024 through July 2, 2024.

On a motion by Jennifer Van Gorder, seconded by Eric Carlson and

Following a roll call vote, the Board of Education voted unanimously to approve the Administrative Request for Sabbatical Leave of Absence as presented.

8.1.b. Administrative Retirement

Carbone, Catherine - BOE - Superintendent of Schools - Effective July 3, 2024

On a motion by Jennifer Van Gorder, seconded by Eric Carlson and

Following a roll call vote, the Board of Education voted unanimously to approve the Administrative Retirement as presented.

8.1.c. Teacher Retirements

Mazzone, Ida - SSS - Grade 1 Teacher - Effective June 30, 2024

Plourde, Gerard - BCHS - Social Studies Teacher - Effective June 30, 2024

On a motion by Jennifer Van Gorder, seconded by Eric Carlson and

Following a roll call vote, the Board of Education voted unanimously to approve the Teacher Retirements as presented.

8.1.d. Teacher Resignations - Effective June 19, 2024

LaMarre, Marie - SSS - Grade 2 Teacher

Meusel, Amanda - WB - Grade 2 Teacher

Meyer, Erin - BEHS - Science Teacher

Palmero,Carolynn - BAIMS - Grade 8 Math Teacher

Young, Tylar - ID - Special Education Teacher

On a motion by Jennifer Van Gorder, seconded by Eric Carlson and

Following a roll call vote, the Board of Education voted unanimously to approve the Teacher Resignations as presented.

8.1.e. New Teacher Hires

Croce, Meghan - BEHS - Mathematics Teacher - Effective August 26, 2024

Janick, Paige - WB - Grade 1 Teacher - Effective May 28, 2024

8.1.f. Teacher Request for Unpaid Leave of Absence

Ojard, Hannah - BAIMS - Social Worker effective on or about November 21, 2024 and returning on January 2, 2025.

On a motion by Jennifer Van Gorder, seconded by Eric Carlson and

Following a roll call vote, the Board of Education voted unanimously to approve the New Teacher Hires as presented.

9. PUBLIC COMMENT

Tom Baril – 498 East Road – Addressed the Board regarding DEI.

Deborah Baril – 498 East Road – Addressed the Board regarding DEI.

Jocelyn Benoit – 38 High Meadow Lane – Addressed the Board regarding the heat issue at Greene-Hills School

Jennifer Benevento – 239 Grove Street – Addressed the Board regarding social behavior

Kelly Badyrka – 4 Bridgeport Ave – Addressed the Board regarding Ivy Drive State Investigation

Lauren Vernaglia – 79 Beechwood Lane – Addressed the Board regarding Board Leadership

Rachel DeConte – 111 Old Turnpike Road – Addressed the Board regarding Ivy Drive

Wyatt DeConte – 111 Old Turnpike Road – Addressed the Board regarding Advocating for Mrs. Gomes

10. DELIBERATED ITEMS/DISTRICT LEADERSHIP TEAM REPORTS

10.1. Report on Dress Down Days for the 2023-2024 School Year

Dr. Dietter presented the Dress Down Days for the 2023-2024 School Year Report. The Board of Education agreed to waive the staff dress code for monthly dress down days that would benefit students and/or staff. Attached is this year's list of charities and the monthly amount raised. Staff donated a total of \$17,066.00 for the 2023-2024 school year.

10.2. Special Services Report

Amy Martino presented the monthly Special Education Report. As of June 1, 2024, 1,845 of the 8,140 enrolled Bristol students are identified as requiring Special Education programming. This enrollment reflects 22.67% of the total BPS student population. As of June 1st, 120 students with disabilities required out-of-district placements at private special education school programs. There are 78 students requiring special education programming services at other public out-of-district schools, including magnet schools. During May 2024, 4% of newly registered students were identified as students with special education programming needs at registration. One newly enrolled student received their program and services during May from an out-of-district special education school program. During May, there were (44) 211 and (13) 911 calls.

11. CURRICULUM REVISION

11.1. Grade 8 Math and Algebra Curriculum Revision

Dr. Jaime Rechenberg presented the Grade 8 Math and Algebra Curriculum Revision for a second reading.

On a motion by Jill Fitzsimons-Bula, seconded by Kristen Giantonio and

Following a roll call vote, the Board of Education voted unanimously to approve the Grade 8 Math and Algebra Curriculum Revision as presented.

11.2. Emergency Medical Response Curriculum Revision

Dr. Jaime Rechenberg presented the Emergency Medical Response Curriculum Revision for a second reading.

On a motion by Eric Carlson, seconded by Jennifer Van Gorder and

Following a roll call vote, the Board of Education voted unanimously to approve the Emergency Medical Response Curriculum Revision as presented.

11.3. Modern American History Curriculum Revision

Leszek Ward presented the Modern American History Curriculum Revision for a second reading

On a motion by Jill Fitzsimons-Bula, seconded by Eric Carlson and

Following a roll call vote, the Board of Education voted to approve the Modern American History Curriculum Revision as presented with Seven (7) Commissioners (Carlson, Fitzsimons-Bula, Giantonio, Osenkowski, Simmons, Van Gorder, and Pons) in favor of the motion and one (1) Commissioner Anderson Opposed.

12. TEXTBOOK ADOPTION

12.1. Modern American History Textbook - Second Reading

Leszek Ward presented the Modern American History Curriculum Revision for a second reading.

On a motion by Eric Carlson, seconded by Jennifer Van Gorder and

Following a roll call vote, the Board of Education voted to approve the Modern American History Textbook Adoption as presented with Seven (7) Commissioners (Carlson, Fitzsimons-Bula, Giantonio, Osenkowski, Simmons, Van Gorder, and Pons) in favor of the motion and one (1) Commissioner Anderson Opposed.

13. NEW BUSINESS

Addition of Recommended Budget Cuts to the Agenda

On a motion by Eric Carlson, seconded by Russell Anderson and

Following a roll call vote, the Board of Education voted unanimously to add Recommended Budget Cuts to the Agenda.

Approval of Recommended Budget Cuts and Budget

On a motion by Jennifer Van Gorder, seconded by Shelby Pons and

Following a roll call vote, the Board of Education voted unanimously to approve the Recommended Budget Cuts and the budget.

Discussion followed regarding not agreeing with the previous vote and how the Board came to the recommended cuts.

Commissioner Simmons called for a motion to add a discussion of client/attorney communication regarding an employee complaint to New Business.

Following discussion the motion was amended *to add Attorney-Client communication to the agenda for discussion in Executive Session following the meeting.*

On a motion by Maria Simmons, seconded by Eric Carlson and

Following a roll call vote, the Board of Education voted unanimously to add Attorney-Client communication to the agenda for discussion in Executive Session.

14. BUILDING/FACILITY REPORTS

Peter Fusco, Facilities Director provided the monthly building reports:

CHMS UST

- The tank was delivered and piping was installed.
- Oil and diesel were delivered on Friday, May 31, 2024
- Start-up was this morning
- Miscellaneous paving and site restoration will be completed in the next two weeks

BAIMS

- On Friday, May 31, 2024, the contractor removed their poly barrier and air scrubbers and they were replaced with a new containment and 3 air filtration units by the remediation company
- Work is scheduled to begin on Tuesday, June 11, 2024
- The remediation is scheduled to last 4-5 weeks.
- We are working with the design team on the restoration

New NEMS

- Approval from the state was received and the project is set to go out to bid for Phase One by the end of next week
- The design team and construction manager are finalizing the documents for Phase two
- The PCR for Phase Two will be scheduled for mid-July.
- At next month's meeting, we will be asking for approval on the specifications and drawings.
- This is a requirement for state approval
- These will be emailed to the Commissioners in the next few days

ESSER/ARP

- All contractors are onboard preliminary work has started
- They are currently working on the second shift and plan to move to the first when school is out for the year.

15. INFORMATION/LIAISON REPORTS

Commissioner Giantonio shared a report regarding activities West Bristol School.

Commissioner Osenkowski shared a report regarding activities Ivy Drive School.

Commissioner Van Gorder shared a report regarding activities at Hubbell Elementary School.

Commissioner Simmons shared reports regarding activities at Bristol Eastern High School and South Side School.

16. VOTE TO CONVENE INTO EXECUTIVE SESSION (9:37 p.m.)

On a motion by Eric Carlson, seconded by Kristen Giantonio and

Following a roll call vote, the Board of Education voted unanimously to Convene into Executive Session for the purpose of discussing an attorney-client communication.

17. EXECUTIVE SESSION

PRESENT: Commissioners: Russell Anderson, Jill Fitzsimons-Bula, Eric Carlson, Kristen Giantonio, Lorianne Osenkowski, Maria Simmons, Jennifer Van Gorder and Chair Shelby Pons (By Phone)

ALSO PRESENT: Iris White, Acting Superintendent

The Board reviewed and discussed handouts regarding the Confidential Attorney-Client Privileged Communications.

18. VOTE TO RECONVENE INTO PUBLIC SESSION to take votes on items discussed in Executive Session.

On a motion by Eric Carlson and a second, by Lorraine Osenkowski and

Following a roll call vote, the Board of Education voted unanimously to Reconvene Into Public Session to take votes on items discussed in the Executive Session. (10:58 p.m.)

19. ADJOURNMENT

There being no other business to come before the Board, the meeting should be adjourned. ***This motion, made by Eric Carlson and seconded by Van Gorder, passed unanimously. (10:59 p.m.)***

Respectfully Submitted,



Recording Secretary
Bristol Board of Education

DRAFT

Bristol Central Seal of Biliteracy 2024

Firstname	Lastname	Grade	Language
Dareen	Aboulez	11	Spanish
Edwin	Acevedo Carias	12	Spanish
Melina	Agustin	10	Spanish
Samera	Alyosfi	11	Spanish
Rafael	Antonio	11	Spanish
Brittany	Cantres Cruz	12	Italian
Brittany	Cantres Cruz	12	Spanish
Lissette	Castillo	11	Spanish
Cristian	Cedillo Saetama	10	Spanish
Gabriela	Drewniak	11	Polish
Jeyska	Escalera	11	Spanish
Daigelis	Figueroa	11	Spanish
Caleb	Garcia	12	Spanish
Jade	Gaud Diaz	12	Spanish
Dayanna	Guartan	10	Spanish
Bladimir	Guzman Sagbay	12	Spanish
Jessinet	Irizarry	12	Spanish
Samantha	Jerez	11	Spanish
Johannie	Juarez	12	Italian
Sandra	Lobeski	11	Polish
Julieen	Lopez	11	Spanish
Angel	Lopez Lugo	12	Spanish
Jenilise	Lozada	12	Spanish
Chrissy	Lugo	12	Spanish
Alondra	Marrero Heredia	10	Spanish
Arianna	Martinez	12	Spanish
Migueledwardo	Martinez Peralta	12	Spanish
Kiara	Martinez-Calderon	11	Spanish
Grace	Mazzone	11	Italian
Adrian	Milewski	12	Latin
Domenic	Nugra Morocho	11	Spanish

Nayelis	Oliver Remond	10	Spanish
Freddy	Orellana	12	Spanish
Alex	Orellana	10	Spanish
Paula	Ortiz	11	Spanish
Yandel	Ortiz Rivera	10	Spanish
Ysi	Peralta	11	Spanish
Matthew	Perez	11	Spanish
Emily	Ramirez Pozo	10	Spanish
Adenawer	Ravelo Pena	11	Spanish
Donovan	Rodriguez	11	Spanish
Ivan	Rodriguez	10	Spanish
Yirelis	Rodriguez	10	Spanish
Victoria	Rodriguez Rivera	10	Spanish
Diana	Rojas	10	Spanish
David	Rosario	11	Spanish
Katerine	Sanchez	10	Spanish
Betzy	Santos Lopez	12	Spanish
Byron	Serraty Osorio	12	Spanish
Amy	Ulloa Urgilez	11	Spanish
Evelyn	Valencia Luis	12	Spanish
William	Valenzuela Diaz	10	Spanish
Paola	Valladolid	11	Spanish
Amber	Van Alstyne	11	Spanish
Nikolas	VanBeveren	11	Spanish
Briam	Vargas Suarez	11	Spanish
Kelvin	Zhunio	10	Spanish

Bristol Eastern Seal of Biliteracy 2024

First Name	Last Name	Grade	Language
Chelse	Avila	11	Spanish
Matias	Basantes SanMartin	11	Spanish
Ricardo	Batista	11	Spanish
Nicole	Biadun	12	Polish
Jonathan	Casarola	11	Spanish
Anna	Clevenger	11	Spanish
Hayden	Conklin	11	Spanish
Avery	Costello	11	Spanish
Aubrey	Cruz	11	Spanish
Jose	Cruz-Mendoza	12	Spanish
Aniya	Dancy	11	Spanish
Chase	Dauphinee	11	Spanish
Adoni	Fernandez	11	Spanish
Alina	Guo	11	Spanish
Angelina	Guzman	11	Spanish
Peyton	Hasler	11	Spanish
Mamadou	Kamano	12	Spanish
Dylan	Kehler	11	Spanish
Selina	Kielb	12	Spanish
Maya	Ledwochowski	11	Polish
Sophia	Lu	12	French
Jamayrie	McRae Arroyo	11	Spanish
Steven	Nugra	11	Spanish
Zuleimy	Ortiz	12	Spanish
Maria	Perrone	11	Spanish
Gabriella	Piendak	11	Spanish
Dylan	Prince	11	Spanish
Jazmein	Pryce	11	Spanish
Maria	Restrepo	11	Spanish
Roxana	Rodriguez	11	Spanish
Jamelin	Sagbay Coronel	11	Spanish

Rayssa	Souza Pereira	11	Portuguese
Nevaeh	Torres	11	Spanish
Donata	Trybel	12	Polish
Joemell	Vega	11	Spanish
Giomar	Vigo Gonzalez	10	Spanish

Kieran Glynn (Education)

Education:

Sacred Heart University, Fairfield, CT

Master of Arts in Teaching with Initial Teacher Certification: Mathematics, GPA 3.82

December 2021

Bachelor of Science in Finance

May 2020

Minor in Sports Management and Actuarial Science, Major GPA: 3.54

Dean's List, Spring 2018

Classroom Experience:

City Hill Middle School, Naugatuck, CT

September 2021-June 2022

- Student taught and then transitioned full time into managing an algebra class, 2 grade 8 classes and 2 grade 7 classes
- Graded quizzes and tests, developed review guides and answer sheets for quizzes and tests
- Developed and implemented weekly lesson plans, primarily focused on algebra
- Created exit tickets and scavenger hunts that the rest of the math department found useful

Thomaston High School, Thomaston, CT

September 2022-present

- Managed 2 8th grade math classes as well as 2 Statistics/Probability classes
 - Implemented my own curriculum for Statistics/Probability class
- Graded quizzes and tests, developed review guides and answer sheets for quizzes and tests
 - Stayed after school to facilitate make up exams and review for upcoming exams
- Collaborated with Special Education co-teacher to plan for differentiation in the classroom
- Created competition based classroom environment during month of March around March Madness
 - March Mathness
 - Viewed it as a great way to reinstate classroom expectations and student responsibility by having them compete against each other for various prizes

Athletics:

NCAA Division I Athletic Scholarship, Football

August 2016-June 2020

NCAA Division I Football, Sacred Heart University

August 2016-November 2019

Additional Experience:

Washington DC Trip Coordinator, Thomaston, CT

September 2023-present

- Collaborated with WorldStrides Group Travel and Experience to plan the itinerary for the 8th grade Washington DC trip.
- Led pre-trip meeting with parents and students explaining what to expect and bring on trip
- Put students in groups/rooms that would allow them to be successful both from a educational, and social perspective

Varsity Football Coach, Newtown, CT

April 2023-present

Varsity Linebacker Coach/Junior Varsity Defensive Coordinator

- Defensive play calling responsibilities for Junior Varsity
- Came up with individual drills for linebacker position group to work on every practice and pre game
- Collaborated with other coaches weekly to game-plan for upcoming opponents

Skills, Achievements and Awards:

- Developed strong leadership and teamwork qualities through roles within the SHU Football Program.
- Bloomberg Market Concepts Certification December 2018
 - Worked with Bloomberg Market Concepts in Global Financial Markets, and Corporate Finance courses at Sacred Heart University
- Recipient, Excel Certification May 2019

Kelsey Onofrio

a

Summary:

Enthusiastic and creative professional, with 8 years experience teaching middle school math, in urban districts. A CT NOYCE Math Teacher Leadership Fellow of 2 years. Trained professional in the field of STEM education. Real world experience with curriculum writing and the Thinking Classroom model. Training in classroom management techniques and strategies.

Core Qualifications:

- CT NOYCE Math Teacher Leader Program Fellow
- Creative lesson plan and Thinking Classroom task based curriculum development
- Effectively maintains classroom management and works proactively to fit students' need
- Experience working with a Co-teacher and special education students
- Experience working with English language learners.
- Experience teaching bilingual lessons (Spanish)
- Facilitates parent/teacher conferences
- Effectively works and communicates with parents and co-workers

Education and Training

Albertus Magnus College, 2022

New Haven CT, USA

MA, Education (STEM)

3.892 GPA

Alternate Route to Certification, 2017

Hartford CT, USA

Student Teaching Spring 2017

Eastern Connecticut State University, 2015

Willimantic, CT, USA

Mathematics

Southern Connecticut State University, 2012

New Haven, CT, USA

BA Music

Dean's List

3.19 GPA

Kelsey Onofrio

2

Professional Experience

- 8th grade math teacher

September 2019 – Present

Joseph Melillo Middle School – East Haven

Principal: Darcie Doyon

I teach 3 periods of 8th grade Pre-Algebra, and 1 period of Algebra. Over the course of my five years in East Haven, I've worked to develop an 8th grade curriculum based on the Thinking Classroom model using rich thinking tasks that reinforce the 8th grade common core math state standards. I successfully presented four professional development sessions to school admin, secondary math teachers, and elementary school teachers. I facilitated an integrated STEM summer program for grades 6-8, that focused on student-driven learning, interdisciplinary projects and small group instruction.

- 7th grade math teacher

September 2017-June 2019

Mauro-Sheridan Interdistrict Magnet – New Haven

Principal: Mrs. Sandy Kaliszewski

I taught 3 periods of 7th grade including one Pre-Algebra, and 1 period of 6th grade. I taught using the Springboard textbook and curriculum published by CollegeBoard. I worked closely with the school's math coach and attended several training sessions involving the math department to further my knowledge of the curriculum and the use of technology within my classroom. I also volunteered in my students' 7th grade choir where I worked with the choir director and participated in their spring concert.

- Math Tutor

September 2015 – March 2016

Madison Tutoring LLC- Madison, Ct

As a Math Tutor, I work with assigned students for one hour sessions. I assist students with completing homework, studying for assessments, and completing personalized lessons and activities connected to their in-class lessons that I create. I also work with students on executive functioning.

- 6th Grade Math Teacher

September 2014 – June 2015

Bennie Dover Jackson Middle School- New London, Ct

Principal: Dr. Alison Burdick

I was hired to teach at Bennie Dover Jackson Middle School under a one-year Duration Shortage Area Permit (DSAP).

Jacklyn Tobin

EDUCATION

Master of Science in Brain-Based Teaching & Learning

Graduated May 2014

Nova Southeastern University, Fort Lauderdale, Florida GPA: 4.0

Connecticut Alternate Route to Certification Program (ARC)

September 2011 – May 2012

Office of Financial and Academic Affairs for Higher Education
Certified Teacher Spanish 7-12 (023) & Elementary (101)

Bachelor of Arts Stonehill College North Easton, Massachusetts

Graduated May 2008

Major: Communication Minor: Spanish
Lamba Epsilon Sigma Stonehill Honor Society GPA: 3.56

TEACHING-RELATED EXPERIENCE

Elementary Spanish Teacher Grades 5-6

New Hartford Public Schools- Ann Antolini School

August 2019 – Present

- Singleton Spanish teacher department of one, in charge of re-creating World Language Spanish program to students in grades 5-6, around 120 students
- Designs and restructures curricula for both grades with focus on impact of Spanish culture on the world, STEAM and cross-curricula standards supporting literacy, math, social studies and science where appropriate
- Collaborates regularly with other specialists to facilitate cross-curricula subjects and activities
- Researches up to date world language teaching practices that aid in language acquisition
- Implements behavioral management strategies to promote growth mindset mentality

Elementary Spanish Teacher Grades K-2 ~370 students

Granby Public Schools- Kelly Lane School

October 2022 – June 2023

- Temporary 2-day/week position
- Designed curricula for grades K-2 with focus on impact of Spanish culture on the world, cross-curricula standards
- Generated digital lessons and material for students distributed weekly
- Collaborated regularly with other Spanish teachers in district to facilitate articulated curricula
- Researched up to date world language teaching practices that aid in language acquisition
- Implemented behavioral management strategies to promote growth mindset mentality

Elementary Spanish Teacher Grades 2-5

Riverside Magnet School at Goodwin College

August 2017 – June 2019

- Originated Spanish program at the school as a department of one Spanish language acquisition to students grades 2-5, around 260 students
- Researched world language teaching practices that aid in language acquisition
- Developed curricula for all grades with focus on Spanish cultures, cross-curricula subjects
- Generated rubrics for proficiency across levels to promote mastery
- Implemented behavioral management systems

High School Spanish Teacher Grades 9-12

Ellington High School

August 2012 -June 2017

- AP Spanish teacher helping students get ready for the AP Spanish Language and Culture Exam.
- Revised Spanish 4 curriculum to fit new ACTFL Standards and modes of language
- First to implement flipped classroom setup in the world language department
- Conducted classroom lessons in Spanish classes, grades 9-12 using effective teaching and brain-based learning strategies
- Developed new curriculum for new textbook series for Spanish I, II & III according to National ACTFL World Language standards
- Utilized technology through Chromebooks to implement flipped classrooms highlighting culture, grammar, literature, art, etc.

Continues to page J. Tobin, 2

REFERENCES:

Name: Dr. Jeffery Sousa
Superintendent
New Hartford Public Schools
Phone: (860) 379-8546
Email: sousaj@newhtfd.org

Name: Joe Alaimo
Methods Professor
ARC Program
Phone: (860) 922-1913
Email: jalaimo45@gmail.com

Name: Dr. Sarah Lindstrom
Spanish Teacher
Bristol Central High School
Phone: (860) 919-9117
Email: sarahlindstrom@bristol12.org

Name: Jenn Parsons
Assistant Superintendent
Granby Public Schools
Phone: (860) 844-5254
Email: parsonsj@granbyschools.org

Name: Dr. Kelly Carroll
Principal Ann Antolini
New Hartford Public Schools
Phone: 860-489-4169
email: carrollk@newhtfd.org

Student Teaching Experience

Glastonbury High School

Spring 2012

- Conducted classroom lessons in Spanish classes, grades 9-12
- Created lesson plans about Cuban immigration, Spanish storybooks, phonetics and the Spanish conquest according to National World Language and Common Core Standards for Spanish classes

Daycare Volunteer

Casa Del Niño Guarderia Day Care Center in Quetzaltenango, Guatemala

Summer 2008

Bilingual Classroom Volunteer

Arnone Elementary School in Brockton, Massachusetts

January – May, 2008

Student Teacher

Colegio de Santa Maria in Granada, Spain

January – June, 2007

SKILLS

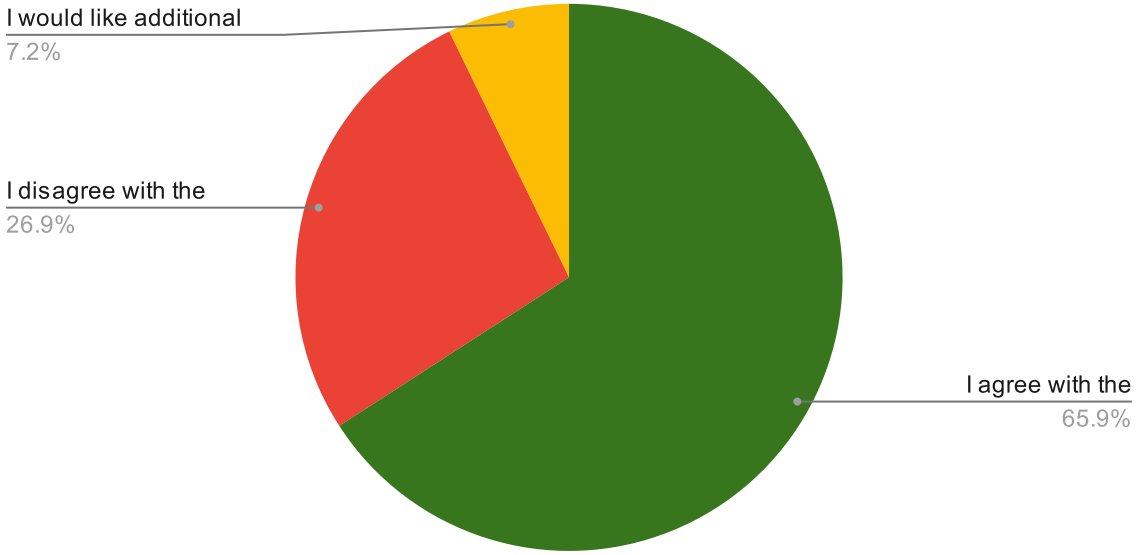
Language: Advanced knowledge of Spanish; Basic knowledge of Latin and Italian

Computer: Extensive knowledge of Google Classroom, Google Forms, Parent Communication platforms, school-friendly social media, Excel, Word, PowerPoint, Adobe Acrobat

Active Boards/Smart Boards: Knowledge of Active and Smart Board functions

I agree with the proposed start times.	438								
I disagree with the proposed start times.	179								
I would like additional options discussed at a public forum.	48								
	665								

**Proposed School Start and Dismissal Time Changes 24/25
School Year**



Regular School Day			Regular School Day		
Monday, Tuesday, Thursday, Friday			Wednesday		
Grade Level	Start/End	Duration	Grade Level	Start/End	Duration
AM PreK	9:05 - 11:35	2 hrs 30 mins	AM PreK	9:05 - 11:20	2 hrs 15 min
PM PreK	1:00 - 3:30	2 hrs 30 mins	PM PreK	12:50 - 3:05	2 hrs 15 min
Grades K-5 @ K-5	9:10 - 3:30	6 hrs 20 mins	Grades K-5 @ K-5	9:10 - 3:05	5 hrs 55 mins
Grades K-8 @ K-8	8:10 - 2:45	6 hrs 35 mins	Grades K-8 @ K-8	8:10 - 2:20	6 hrs 10 mins
Middle Schools	8:10 - 2:45	6 hrs 35 mins	Middle Schools	8:10 - 2:20	6 hrs 10 mins
BAIMS (6-8)	8:15 - 2:50	6 hrs 35 mins	BAIMS (6-8)	8:15 - 2:25	6 hrs 10 mins
High Schools	7:35 - 2:00	6 hrs 25 mins	High Schools	7:35 - 1:35	6 hrs 0 mins
Late Opening - 2-hour Delay			Late Opening - 2-hour Delay		
Monday, Tuesday, Thursday, Friday			Wednesday		
Grade Level	Start/End	Duration	Grade Level	Start/End	Duration
AM PreK	No AM PreK		AM PreK	No AM PreK	
PM PreK	1:00 - 3:30	2 hrs 30 mins	PM PreK	12:50 - 3:05	2 hrs 15 min
Grades K-5 @ K-5	11:10 - 3:30	4 hrs 20 mins	Grades K-5 @ K-5	11:10 - 3:05	3 hrs 55 mins
Grades K-8 @ K-8	10:10 - 2:45	4 hrs 35 mins	Grades K-8 @ K-8	10:10 - 2:20	4 hrs 10 mins
Middle Schools	10:10 - 2:45	4 hrs 35 mins	Middle Schools	10:10 - 2:20	4 hrs 10 mins
BAIMS (6-8)	10:15 - 2:50	4 hrs 35 mins	BAIMS (6-8)	10:15 - 2:25	4 hrs 10 mins
High Schools	9:35 - 2:00	4 hrs 25 mins	High Schools	9:35 - 1:35	4 hrs 0 mins
Shortened Day			Early Release - Inclement Weather		
Lunches Served at All Schools (Including Parent Conference Days)			Wednesday Lunches Served at All Schools		
Grade Level	Start/End	Duration	Grade Level	Start/End	Duration
AM PreK	9:05 - 10:55	1 hrs 50 mins	AM PreK	9:05 - 11:20	2 hrs 15 min
PM PreK	11:25 - 1:15	1 hrs 50 mins	PM PreK	No PM PreK	
Grades K-5 @ K-5	9:10 - 1:15	4 hrs 5 mins	Grades K-5 @ K-5	9:10 - 1:35	4 hrs 25 mins
Grades K-8 @ K-8	8:10 - 12:41	4 hrs 31 mins	Grades K-8 @ K-8	8:10 - 12:55	4hrs 45 mins
Middle Schools	8:10 - 12:41	4 hrs 31 mins	Middle Schools	8:10 - 12:55	4hrs 45 mins
BAIMS (6-8)	8:15 - 12:46	4 hrs 31 mins	BAIMS (6-8)	8:15 - 1:00	4hrs 45 mins
High Schools	7:35 - 12:06	4 hrs 31 mins	High Schools	7:35 - 12:05	4 hrs 30 mins
			Parochial Elem	8:00 - 12:35	4 hrs 40 mins

DRAFT TO BE EDITED ACCORDING TO SITUATION AND PUT ON BUILDING LETTERHEAD

September 23, 2023

Dear Parents and Guardians,

I hope that your scholar is having an enjoyable and successful start to the school year! I am writing to inform you of a staffing matter pertaining to your scholar's _____ class. We are actively engaged in the recruitment process for a permanent and certified teacher, however, we do not have one in place at this time. We continue to recruit and seek a new member of the _____ School team and in the meantime, _____ will serve as a long term substitute for your scholar's class. _____ has _____ years of experience serving in education and will have the close guidance and support from our administrative team.

We anticipate filling the position shortly as we have multiple candidates in the selection process at this time **OR** We will keep you informed of the status of filling the position with a permanent teacher or any other changes that might be made in the meantime.

If you have any questions or wish to discuss this matter, please do not hesitate to contact me at _____. Your scholar's learning experience is important to us and we look forward to a continued partnership with you in the 2023-24 school year.

Sincerely,

Principal, _____ School

July 2024 Board of Education Certified Staffing Vacancy Status Update

School/ Program	Certified Vacancies as of July 1, 2024	Job Posting #	# of Interviews conducted
Adult Ed.			
BAIMS	Social Studies Gr. 6-8	6803	1
	Math Gr. 6-8	6795	1
BCHS			
BEHS	Special Education Teacher--Destinations	6743	2
BPA			
CHMS	Science Teacher, Gr. 7	6819	3
	Science Teacher, Gr. 8	6802	2
CW	Art Teacher (.5 FTE) BAIMS (.25), BPA (.25)	6797	3
	Special Education Teacher (MTV/ID)	6761	4
	LEAD Program Teacher (Pre-K)	6678	3
	1 BCBA's	6688	4
	Occupational Therapist (.8)	6771	3
	Literacy Coach (EPH)		0
	Supervisor of Secondary STEM	6826	0
	PE/Health Teacher--Currently NEMS/BAIMS	6835	0
	Bilingual TESOL Teacher Grades K-12	6801	1
	City Wide Library Media Specialist	6785	7
	PE/Health Teacher (WB) Gr. 6-8 (Health Teacher)	6708	6
EDGE PreK	Pre-K Teacher	6679	6
EPH	Gr. 1		0
	Special Education Teacher/LEAD Program	6787	4
GH	Kindergarten Teacher	6746	4
	Assistant Principal	6815	0
	ELA Gr. 6	6774	4
ID	Special Education Teacher/Breakthrough	6775	4
	Gr. 5	6763	5
MTV			
NEMS			
SSS	Gr. 4	6827	17
	Gr. 5	6798	17
Stafford			
WB	Gr. 2	6764	9



Bristol Public Schools
Talent Management Office

Candidate Hiring Process

Upon completion of the interviews for the position, please complete the process below for the desired candidate. This should be done for all certified and non-certified positions.

This form/process should be used for external candidates new to the district and for any internal candidates switching outside of their current role (ex. a paraeducator becoming a secretary).

Important Note: If any candidates require a DSAP, the hiring manager must meet with the Director of Talent Management before completing the Recommendation to Hire form.

1. **Complete the Candidate Rating Form** - A new template has been created and linked into this document to include the information for all candidates and all members of the interview committee. *If additional space is needed, please create an additional form for extra candidates and/or interview committee members.*
2. **Complete Reference Checks for the Candidate** - (Must provide **3**) Please use the template linked into this document to complete the Reference Checks. Since the types of questions differ depending on the type of reference (previous employer/supervisor or professional experience), there are 3 spaces for each reference type.
 - a. *Please **DO NOT** use family members that are listed as references - request additional references from the candidate if needed.*
3. **Download Letters of Recommendation from Applitrak.** (Must provide **3**)
 - a. Please be sure to check the Applitrack Application when downloading Letters of Recommendation. ***The candidate's Applitrack Application must be COMPLETE before submitting Recommendation to Hire to OTM.***
4. **Complete the Recommendation to Hire Form via SeamlessDocs.** All of the forms listed above will be uploaded with the SeamlessDoc submission.

Your completed Recommendation to Hire Packet will be sent directly to OTM to begin processing in the order that it was received.

Course Title:	Content Area:	Grade Level:	Credit (if applicable)
Library Media Science	Library Media	Grade 1	N/A

Course Description:

The school library media programs of Bristol Public Schools facilitate opportunities for students and faculty to become lifelong learners who thrive in complex learning environments. Through instructional strategies designed to infuse inquiry and technology as tools for learning, students will develop skills to interpret and develop new understandings, seek diverse perspectives, create new knowledge, and grow as ethical, digital citizens. Through equitable access to reading and information resources, the library media programs promote lifelong reading in a safe environment conducive to learning.

Aligned Core Resources:

N/A

Connection to the [BPS Vision of the Graduate](#)

- Media Literacy
 - Apply a fundamental understanding of the ethical/legal issues surrounding the access and use of media
- Communications
 - Communicate effectively in diverse environments (including becoming multilingual)
- Communications and Technology Literacy
 - Use digital technology, communication tools, and/or networks to access, manage, integrate, evaluate, and create information in order to function in a knowledge society
- Information Literacy
 - Access information on efficiently (time) and effectively (sources)
 - Evaluate information critically and competently
 - Use information accurately and creatively for the issue or problem at hand
 - Manage the flow of information from a wide variety of sources
 - Apply a fundamental understanding of the ethical/ legal issues surrounding the access and use of information

Additional Course Information:
Knowledge/Skill Dependent courses/prerequisites

N/A

Link to [Completed Equity Audit](#)

[LMS Curriculum Audit](#)

Standard Matrix

AASL	CCS	ISTE	Module 1	Module 2	Module 3	Module 4
I. Inquire (AASL) Build new knowledge by inquiring, thinking critically, identifying problems, and developing strategies for solving problems.						

I.A.1-2 Think Learners display curiosity and initiative by: 1. Formulating questions about a personal interest or a curricular topic. 2. Recalling prior and background knowledge as context for new meaning.	W.7 W.8	1A, (K-5) 3A-B (4-5)		X	X	
I.B.1 Create (1-5) Learners engage with new knowledge by following a process that includes: 1. Using evidence to investigate questions.	W.8	4A		X		
I.B.3 Create (2-5) Learners engage with new knowledge by following a process that includes: 3. Generating products that illustrate learning.	W.6 (2-5)	4A				
I.D.1 (K-1) I.D.1-4 Grow (2-5) Learners participate in an ongoing inquiry-based process by: 1. Continually seeking knowledge. 2. Engaging in sustained inquiry. 3. Enacting new understanding through real-world connections. 4. Using reflection to guide informed decisions.	W.7	3D			X	
II. Include (AASL) Demonstrate an understanding of and commitment to inclusiveness and respect for diversity in the learning community.						
II.A.3 Think Learners contribute a balanced perspective when participating in a learning community by: 3. Describing their understanding of cultural relevancy and placement within the global learning community.	RI.6	N/A			X	
II.B.3 Create [K-3 in Nutmeg Common Experience] Learners adjust their awareness of the global learning community by: 3. Representing diverse perspectives during learning activities.	SL.1 in K-2, W.6 in 3-5	7D			X	X
II.D.2 Grow Learners demonstrate empathy and equity in knowledge building within the global learning community by: 2. Demonstrating interest in other perspectives during learning activities.	SL.1	1B	X		X	
II.D.3 Grow	SL.1	1B	X			

Learners demonstrate empathy and equity in knowledge building within the global learning community by: 3. Reflecting on their own place within the global learning community.						
III. Collaborate (AASL) Work effectively with others to broaden perspectives and work toward common goals						
III.B.1 Create Learners participate in personal, social, and intellectual networks by: 1. Using a variety of communication tools and resources.	W.6 (2-5)	1C				
III.D.1 Grow Learners actively participate with others in learning situations by: 1. Actively contributing to group discussions.	SL.1	7C				X
III.D.2 Grow Learners actively participate with others in learning situations by: 2. Recognizing learning as a social responsibility.	SL.1	1B	X			
IV. CURATE (AASL) Make meaning for oneself and others by collecting, organizing, and sharing resources of personal relevance.						
IV.A.1-2 Think (K-3) IV.A.1-3 (GRADES 4-5) Learners act on an information need by: 1. Determining the need to gather information. 2. Identifying possible sources of information. 3. Making critical choices about information sources to use.	W.7	3C		X		
IV.B.1-2 Create (K-3) IV.B.1-4 Create (GRADES 4-5) Learners gather information appropriate to the task by: 1. Seeking a variety of sources. 2. Collecting information representing diverse perspectives. 3. Systematically questioning and assessing the validity and accuracy of information. 4. Organizing information by priority, topic, or other systematic scheme.	W.7 W.8	6C-D		X		
V. EXPLORE (AASL) Discover and innovate in a growth mindset developed through experience and reflection.						
V.A.1 Think Learners develop and satisfy personal curiosity by: 1. Reading widely and deeply in multiple formats and write	RI.10 RL.10	3D			X	X

and create for a variety of purposes.						
V.A.3 Think (3-5) Learners develop and satisfy personal curiosity by: 3. Engaging in inquiry-based processes for personal growth.	W.7	6C				
V.B.2 Create [Maker/Tinker, Coding, Indi, LittleBits, Bolts] Learners construct new knowledge by: 2. Persisting through self-directed pursuits by tinkering and making.	SL.1	5C			X	
V.C.1 Share Learners engage with the learning community by: 1. Expressing curiosity about a topic of personal interest or curricular relevance.	W.7	7B			X	
V.C.3 Share [Collaborating w/Indi, LittleBits, Bolts] Learners engage with the learning community by: 3. Collaboratively identifying innovative solutions to a challenge or problem.	SL.1	7C			X	
V.D.1 Grow [iteration] Learners develop through experience and reflection by: 1. Iteratively responding to challenges.	SL.1	1C			X	
VI. ENGAGE (AASL) Demonstrate safe, legal, and ethical creating and sharing of knowledge products independently while engaging in a community of practice and an interconnected world.						
VI.A.1 Think (K-2) VI.A.1-2 Think (3) VI.A.1-3 Think (4-5) Learners follow ethical and legal guidelines for gathering and using information by: 1. Responsibly applying information, technology, and media to learning. 2. Understanding the ethical use of information, technology, and media. 3. Evaluating information for accuracy, validity, social and cultural context, and appropriateness for need.	RI.5 (K-3) W.8 SL.2 (3-5)	2C				
VI.B.1-2 Create Learners use valid information and reasoned conclusions to make ethical decisions in the creation of knowledge by: 1. Ethically using and reproducing others' work. 2. Acknowledging authorship and demonstrating respect for the intellectual property of others.	RI.2 W.8	2C				
VI.C.2 Share	W.8	2C				

Learners responsibly, ethically, and legally share new information with a global community by: 2. Disseminating new knowledge through means appropriate for the intended audience.	SL.2 (3-5)					
VI.D.1, 3 Learners engage with information to extend personal learning by: 1. Personalizing their use of information and information technologies.	SL.1	2AB,D	X			

Unit Links

If unit headings are formatted as a heading, then we can link a Table of Contents to better organize and provide faster access to each unit

[Module 1: Digital Citizenship](#)

[Module 2: Information and Media Literacy](#)

[Module 3: Growth and Curiosity](#)

[Module 4: Presentation of Information \(Show\)](#)

Module Title:		
Module 1: Digital Citizenship		
Relevant Standards: Bold indicates priority		
AASL	CCS	ISTE
II.D.2-3 Grow Learners demonstrate empathy and equity in knowledge building within the global learning community by: 2. Demonstrating interest in other perspectives during learning activities. 3. Reflecting on their own place within the global learning community.	SL.1	1B
III.D.2 Grow Learners actively participate with others in learning situations by: 2. Recognizing learning as a social responsibility.	SL.1	1B
VI.D.1, 3 Learners engage with information to extend personal learning by: 1. Personalizing their use of information and information technologies.	SL.1	2AB,D
Essential Question(s):	Enduring Understanding(s):	
<ol style="list-style-type: none"> How do you stay safe when visiting a website or app? Why is it important to listen to your feelings when using technology? How can we be safe, responsible, and respectful online? 	<p>Evaluate information critically and competently</p> <p>Communicate effectively in diverse environments (including becoming multilingual)</p>	
Demonstration of Learning:	Pacing for Unit	
Visual Representation Performance Task	Addressed and spiraled throughout the year	
Family Overview (link below)	Integration of Technology:	
Grade 1 Family Overview	<i>Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning</i>	
Unit-specific Vocabulary:	Aligned Unit Materials, Resources, and Technology (beyond core resources):	
Online Pause Uncomfortable Caution Just Right	<i>Digital Media Materials</i>	

Opportunities for Interdisciplinary Connections:		Anticipated misconceptions:	
Connect to SEL Advisory Lessons Connect to to ELA Units		Everything online is safe and appropriate	
Connections to Prior Units:		Connections to Future Units:	
Continuation of Module 1 in Kindergarten		Continuation of Module 1 in Grade 2	
Differentiation through <i>Universal Design for Learning</i>			
UDL Indicator		Teacher Actions:	
3.1 COMPREHENSION > Comprehension: Activate or supply background knowledge		Anchor instruction by linking to and activating relevant prior knowledge (e.g., using visual imagery, concept anchoring, or concept mastery routines)	
9.2 ENGAGEMENT > Self Regulation: Facilitate personal coping skills and strategies		Provide differentiated models, scaffolds and feedback for: - Managing frustration - Seeking external emotional support - Developing internal controls and coping skills - Use real life situations or simulations to demonstrate coping skills	
Supporting Multilingual/English Learners			
Related <i>CELP standards:</i>		Learning Targets:	
1.2: participate in grade appropriate oral and written exchanges of information, ideas, and analyses, responding to peer, audience, or reader comments and questions.		With prompting and supports: <ul style="list-style-type: none"> I can participate in short conversations using words and phrases acquired in conversations, reading, and being read to I can take turns I can respond to yes/no and wh- questions 	
Common Learning Experience	Learning Target	Success Criteria/ Assessment	Resources
1.DigCit.1 Media Balance	I can learn practical strategies for managing my feelings.	Recognize the different kinds of feelings they can have when using technology. Know what to do when they don't have a good feeling when using technology.	Digital Media Materials

<p>1.DigCit.2 Being an Informed Critical Consumer of Media</p>	<p>I can understand the importance of being safe, responsible, and respectful online.</p>	<p>Learn mnemonics to remember basic digital citizenship concepts.</p>	<p>Digital Media Materials</p>
<p>1.DigCit.3 Safe Spaces Online</p>	<p>I can learn how to identify "just right" content to learn, play, and explore the internet safely.</p>	<p>Learn to identify websites and apps that are "just right" and "not right" for them.</p> <p>Know how to get help from an adult if they are unsure about a website.</p>	<p>Digital Media Materials</p>

Module Title:

Module 2: Information and Media Literacy

Relevant Standards: Bold indicates priority

AASL	CCS	ISTE
I.A.1-2 Think Learners display curiosity and initiative by: 1. Formulating questions about a personal interest or a curricular topic. 2. Recalling prior and background knowledge as context for new meaning.	W.7 W.8	1A
I.B.1 Create Learners engage with new knowledge by following a process that includes: 1. Using evidence to investigate questions.	W.8	4A
IV.A.1-2 Think Learners act on an information need by: 1. Determining the need to gather information. 2. Identifying possible sources of information.	W.7	3C
IV.B.1-2 Create Learners gather information appropriate to the task by: 1. Seeking a variety of sources. 2. Collecting information representing diverse perspectives.	W.7 W.8	6C-D

Essential Question(s):	Enduring Understanding(s):
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<ol style="list-style-type: none"> How do I identify a wondering I have? How do I locate information in order to answer a question? How do I find information in a source? How do I participate in shared research projects? How do I recall information in order to answer a question? 	Use digital technology, communication tools, and/or networks to access, manage, integrate, evaluate, and create information in order to function in a knowledge society Use information accurately and creatively for the issue or problem at hand Apply a fundamental understanding of the ethical/legal issues surrounding the access and use of media
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Demonstration of Learning:	Pacing for Unit
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Locating and Recalling Information Performance Task	Addressed and spiraled throughout the year
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Family Overview (link below)	Integration of Technology:
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Grade 1 Family Overview	<i>Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning</i>
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Unit-specific Vocabulary:		Aligned Unit Materials, Resources, and Technology (beyond core resources):	
Information Sources Variety Organize Relevant Authorship		Digital Productivity Tools Online Databases Print Materials	
Opportunities for Interdisciplinary Connections:		Anticipated misconceptions:	
Connect to ELA Curriculum Connect to science and social studies topics		It's okay to take notes by copying word for word.	
Connections to Prior Units:		Connections to Future Units:	
Continuation of module in Grade K		Continuation of module in Grade 2	
Differentiation through <i>Universal Design for Learning</i>			
UDL Indicator		Teacher Actions:	
3.3 REPRESENTATION > Comprehension: Guide information processing and visualization		<ul style="list-style-type: none"> - Give explicit prompts for each step in a sequential process - Provide interactive models that guide exploration and new understandings - Introduce graduated scaffolds that support information processing strategies - Progressively release information (e.g., sequential highlighting) - Remove unnecessary distractions unless they are essential to the instructional goal 	
6.3 ACTION & EXPRESSION > Executive Functioning: Facilitate managing information and resources		<ul style="list-style-type: none"> - Provide graphic organizers and templates for data collection and organizing information - Embed prompts for categorizing and systematizing 	
Supporting Multilingual/English Learners			
Related <i>CFLP standards:</i>		Learning Targets:	
1.5: conduct research and evaluate and communicate findings to answer questions or solve problems.		With prompting and supports: <ul style="list-style-type: none"> • I can participate in shared research projects to answer a question • I can recall information from experiences • I can gather information from provided sources • I can label information 	
Common Learning Experience	Learning Target	Success Criteria/ Assessment	Resources
1.Inquiry.1 Generating an information need	I can identify a topic I am curious about.	Develop a wondering about a topic and	Online Databases Print Materials

	I can use a source about the topic to answer a question.	thoughtfully use a source to address the topic.	
1.Inquiry.2 Use books, databases such as Pebble Go, or other sources to locate information.	I can locate answers in more than one source. I can organize the information to help answer a question.	Find a variety of sources and organize information using a chart.	Digital Productivity Tools Online Databases Print Materials

Module Title:

Module 3: Growth and Curiosity

Relevant Standards: Bold indicates priority

AASL	CSS	ISTE
I.A.1-2 Think Learners display curiosity and initiative by: 1. Formulating questions about a personal interest or a curricular topic. 2. Recalling prior and background knowledge as context for new meaning.	W.7 W.8	1A
I.D.1 Grow Learners participate in an ongoing inquiry-based process by: 1. Continually seeking knowledge.	W.7	3D
II.A.3 Think Learners contribute a balanced perspective when participating in a learning community by: 3. Describing their understanding of cultural relevancy and placement within the global learning community.	RI.6	N/A
II.B.3 Create [K-3 in Nutmeg Common Experience) Learners adjust their awareness of the global learning community by: 3. Representing diverse perspectives during learning activities.	SL.2	7D
II.D.2 Grow Learners demonstrate empathy and equity in knowledge building within the global learning community by: 2. Demonstrating interest in other perspectives during learning activities.	SL.1	1B
V.A.1 Think Learners develop and satisfy personal curiosity by: 1. Reading widely and deeply in multiple formats and write and create for a variety of purposes.	RI.10 RL.10	3D
V.B.2 Create Learners construct new knowledge by: 2. Persisting through self-directed pursuits by tinkering and making.	SL.1	5C
V.C.1 Share Learners engage with the learning community by: 1. Expressing curiosity about a topic of personal interest or curricular relevance.	W.7	7B
V.C.3 Share Learners engage with the learning community by: 3. Collaboratively identifying innovative solutions to a challenge or problem.	SL.1	7C
V.D.1 Grow Learners develop through experience and reflection by: 1. Iteratively responding to challenges.	SL.1	1C

Essential Question(s):**Enduring Understanding(s):**

<ol style="list-style-type: none"> 1. How do I participate in shared research projects? 2. How can I find answers to my questions? 3. How can I grow as a reader by reading widely and deeply in multiple formats? 4. How can I construct new knowledge by persisting through self-directed pursuits by tinkering and making? 	<p>Use digital technology, communication tools, and/or networks to access, manage, integrate, evaluate, and create information in order to function in a knowledge society</p> <p>Use information accurately and creatively for the issue or problem at hand</p> <p>Access information on efficiently (time) and effectively (sources)</p>
Demonstration of Learning:	Pacing for Unit
Problem Solving Performance Task	Addressed and spiraled throughout the year
Family Overview (link below)	Integration of Technology:
Grade 1 Family Overview	<i>Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning</i>
Unit-specific Vocabulary:	Aligned Unit Materials, Resources, and Technology (beyond core resources):
Curiosity Create questions Research process Personal growth Multiple formats Sequences Loops Debug	Online Databases Print Materials Maker Materials Media in Multiple Formats
Opportunities for Interdisciplinary Connections:	Anticipated misconceptions:
Connect to ELA (literacy) Connect to science and social studies topics Connect to science/math (coding/tinkering)	I am only interested in one type of book This is too hard for me/I can't do this
Connections to Prior Units:	Connections to Future Units:
Continuation of module in Grade K	Continuation of module in Grade 2
Differentiation through <i>Universal Design for Learning</i>	
UDL Indicator	Teacher Actions:
7.2 ENGAGEMENT > Recruiting Interest: Optimize relevance, value, and authenticity	Vary activities and sources of information so that they can be: <ul style="list-style-type: none"> - Personalized and contextualized to learners' lives - Culturally relevant and responsive - Socially relevant - Age and ability appropriate - Appropriate for different racial, cultural, ethnic, and gender groups - Include activities that foster the use of imagination to

	solve novel and relevant problems, or make sense of complex ideas in creative ways		
8.2 ENGAGEMENT > Sustaining Effort & Persistence: Vary demands and resources to optimize challenge	<ul style="list-style-type: none"> - Differentiate the degree of difficulty or complexity within which core activities can be completed - Vary the degrees of freedom for acceptable performance - Emphasize process, effort, improvement in meeting standards as alternatives to external evaluation and competition 		
Supporting Multilingual/English Learners			
Related <i>CELP standards:</i>		Learning Targets:	
1.8: determine the meaning of words and phrases in oral presentations and literary and informational text.		In simple oral presentations and read-alouds about familiar topics, experiences, or events: <ul style="list-style-type: none"> • I can use prompting, context, and visual aids to answer simple questions to determine the meaning of words and phrases. 	
Common Learning Experience	Learning Target	Success Criteria/ Assessment	Resources
1.Grow.1 Self-selected interest opportunities: Find materials on any topic of interest (books, databases)	I can choose a topic that I am curious to learn more about.	Use prior knowledge as a foundation to drive deeper inquiry into a topic of interest or a curricular topic.	Online Databases Print Materials Media in Multiple Formats
1.Grow.2 Guided discovery opportunities: Students explore books and a database and share their learning	I can find answers to my questions in more than one source.	Use a variety of sources to gather information.	Online Databases Print Materials Media in Multiple Formats
1.Grow.3 Listening and responding to diverse texts. Award Books	I can listen to and/or read a variety of books to explore topics. I can adjust my awareness of diverse perspectives during learning activities. I can demonstrate empathy and equity in other perspectives during learning activities.	Read, write, reflect and question while exploring or expressing oneself about a topic of curiosity.	Online Databases Print Materials Media in Multiple Formats
1.Grow.4 Coding	I can persevere through tinkering and making challenges.	Complete a variety of challenges involving coding, tinkering and	Maker Materials Media in Multiple Formats

Tinkering and Making	I can use logical thinking to solve a problem.	making.	
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Module Title:

Module 4: Presentation of Information (Show)

Relevant Standards: Bold indicates priority

AASL	CCS	ISTE
II.B.3 Create [K-3 in Nutmeg Common Experience] Learners adjust their awareness of the global learning community by: 3. Representing diverse perspectives during learning activities.	SL.1	7D
III.D.1 Grow Learners actively participate with others in learning situations by: 1. Actively contributing to group discussions.	SL.1	7C
V.A.1 Think Learners develop and satisfy personal curiosity by: 1. Reading widely and deeply in multiple formats and write and create for a variety of purposes.	RI.10 RL.10	3D

Essential Question(s):	Enduring Understanding(s):
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<ol style="list-style-type: none"> How do I interact with others to discuss first grade topics? How do I show what I learned? 	<p>Use digital technology, communication tools, and/or networks to access, manage, integrate, evaluate, and create information in order to function in a knowledge society</p> <p>Use information accurately and creatively for the issue or problem at hand</p>
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Demonstration of Learning:	Pacing for Unit
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Visual Representation of Information	Addressed and spiraled throughout the year
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Family Overview (link below)	Integration of Technology:
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Grade 1 Family Overview	<i>Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning</i>
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Unit-specific Vocabulary:	Aligned Unit Materials, Resources, and Technology (beyond core resources):
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Product Responsible Community Share Audience	
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Opportunities for Interdisciplinary Connections:	Anticipated misconceptions:
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Connect to ELA units. Connect to science and social studies topics.		Showing what you learn is optional or doesn't matter. The teacher is the only audience of finished work.	
Connections to Prior Units:		Connections to Future Units:	
Continuation of module in Grade K		Continuation of module in Grade 2	
Differentiation through Universal Design for Learning			
UDL Indicator		Teacher Actions:	
5.1 ACTION 7 EXPRESSION > Expression & Communication: Use multiple media for communication		<ul style="list-style-type: none"> - Compose in multiple media such as text, speech, drawing, illustration, comics, storyboards, design, film, music, dance/movement, visual art, sculpture, or video - Use physical manipulatives (e.g., blocks, 3D models) - Use interactive web tools (e.g., storyboards, comic strips, animation presentations) - Solve problems using a variety of strategies 	
Supporting Multilingual/English Learners			
Related CELP standards:		Learning Targets:	
1.3: speak and write about grade-appropriate complex literary and informational texts and topics.		With prompting and supports, <ul style="list-style-type: none"> • I can communicate basic messages about familiar topics, experiences, or events. 	
Common Learning Experience	Learning Target	Success Criteria/ Assessment	Resources
1.Show.1 Create a drawing, a final poster, or a class project	I can share information I've learned in different ways	Create a product that showcases learning.	N/A
1.Show.2 Add appropriate visuals to address a task and audience.	I can make responsible choices when sharing my learning.	Ethically share new information through best means for the intended audience.	N/A

Course Title:	Content Area:	Grade Level:	Credit (if applicable)
Library Media Science	Library Media	Grade 2	N/A

Course Description:

The school library media programs of Bristol Public Schools facilitate opportunities for students and faculty to become lifelong learners who thrive in complex learning environments. Through instructional strategies designed to infuse inquiry and technology as tools for learning, students will develop skills to interpret and develop new understandings, seek diverse perspectives, create new knowledge, and grow as ethical, digital citizens. Through equitable access to reading and information resources, the library media programs promote lifelong reading in a safe environment conducive to learning.

Aligned Core Resources:

N/A

Connection to the [BPS Vision of the Graduate](#)

- Media Literacy
 - Examine how individuals interpret messages differently, how values and points of view are included or excluded, and how media can influence beliefs and behaviors
 - Apply a fundamental understanding of the ethical/legal issues surrounding the access and use of media
- Communications
 - Communicate effectively in diverse environments (including becoming multilingual)
- Communications and Technology Literacy
 - Use digital technology, communication tools, and/or networks to access, manage, integrate, evaluate, and create information in order to function in a knowledge society
- Information Literacy
 - Access information on efficiently (time) and effectively (sources)
 - Evaluate information critically and competently
 - Use information accurately and creatively for the issue or problem at hand
 - Manage the flow of information from a wide variety of sources
 - Apply a fundamental understanding of the ethical/legal issues surrounding the access and use of information

Additional Course Information:
Knowledge/Skill Dependent courses/prerequisites

N/A

Link to [Completed Equity Audit](#)

[LMS Curriculum Audit](#)

Standard Matrix

AASL	CCS	ISTE	Module 1	Module 2	Module 3	Module 4
I. Inquire (AASL)						

Build new knowledge by inquiring, thinking critically, identifying problems, and developing strategies for solving problems.						
I.A.1-2 Think Learners display curiosity and initiative by: 1. Formulating questions about a personal interest or a curricular topic. 2. Recalling prior and background knowledge as context for new meaning.	W.7 W.8	1A, (K-5) 3A-B (4-5)		X	X	
I.B.1 Create (1-5) Learners engage with new knowledge by following a process that includes: 1. Using evidence to investigate questions.	W.8	4A		X		
I.B.3 Create (2-5) Learners engage with new knowledge by following a process that includes: 3. Generating products that illustrate learning.	W.6 (2-5)	4A				X
I.D.1 (K-1) I.D.1-4 Grow (2-5) Learners participate in an ongoing inquiry-based process by: 1. Continually seeking knowledge. 2. Engaging in sustained inquiry. 3. Enacting new understanding through real-world connections. 4. Using reflection to guide informed decisions.	W.7	3D			X	
II. Include (AASL) Demonstrate an understanding of and commitment to inclusiveness and respect for diversity in the learning community.						
II.A.3 Think Learners contribute a balanced perspective when participating in a learning community by: 3. Describing their understanding of cultural relevancy and placement within the global learning community.	RI.6	N/A			X	
II.B.3 Create [K-3 in Nutmeg Common Experience] Learners adjust their awareness of the global learning community by: 3. Representing diverse perspectives during learning activities.	SL.1 in K-2, W.6 in 3-5	7D			X	X
II.D.2 Grow Learners demonstrate empathy and equity in knowledge building within the global learning community by: 2. Demonstrating interest in other perspectives during learning activities.	SL.1	1B	X		X	

II.D.3 Grow Learners demonstrate empathy and equity in knowledge building within the global learning community by: 3. Reflecting on their own place within the global learning community.	SL.1	1B	X			
III. Collaborate (AASL) Work effectively with others to broaden perspectives and work toward common goals						
III.B.1 Create Learners participate in personal, social, and intellectual networks by: 1. Using a variety of communication tools and resources.	W.6 (2-5)	1C				X
III.D.1 Grow Learners actively participate with others in learning situations by: 1. Actively contributing to group discussions.	SL.1	7C				X
III.D.2 Grow Learners actively participate with others in learning situations by: 2. Recognizing learning as a social responsibility.	SL.1	1B	X			
IV. CURATE (AASL) Make meaning for oneself and others by collecting, organizing, and sharing resources of personal relevance.						
IV.A.1-2 Think (K-3) IV.A.1-3 (GRADES 4-5) Learners act on an information need by: 1. Determining the need to gather information. 2. Identifying possible sources of information. 3. Making critical choices about information sources to use.	W.7	3C		X		
IV.B.1-2 Create (K-3) IV.B.1-4 Create (GRADES 4-5) Learners gather information appropriate to the task by: 1. Seeking a variety of sources. 2. Collecting information representing diverse perspectives. 3. Systematically questioning and assessing the validity and accuracy of information. 4. Organizing information by priority, topic, or other systematic scheme.	W.7 W.8	6C-D		X		
V. EXPLORE (AASL) Discover and innovate in a growth mindset developed through experience and reflection.						
V.A.1 Think Learners develop and satisfy personal curiosity by:	RI.10 RL.10	3D			X	X

1. Reading widely and deeply in multiple formats and write and create for a variety of purposes.						
V.A.3 Think (3-5) Learners develop and satisfy personal curiosity by: 3. Engaging in inquiry-based processes for personal growth.	W.7	6C				
V.B.2 Create [Maker/Tinker, Coding, Indi, LittleBits, Bolts] Learners construct new knowledge by: 2. Persisting through self-directed pursuits by tinkering and making.	SL.1	5C			X	
V.C.1 Share Learners engage with the learning community by: 1. Expressing curiosity about a topic of personal interest or curricular relevance.	W.7	7B			X	
V.C.3 Share [Collaborating w/Indi, LittleBits, Bolts] Learners engage with the learning community by: 3. Collaboratively identifying innovative solutions to a challenge or problem.	SL.1	7C			X	
V.D.1 Grow [iteration] Learners develop through experience and reflection by: 1. Iteratively responding to challenges.	SL.1	1C			X	
VI. ENGAGE (AASL) Demonstrate safe, legal, and ethical creating and sharing of knowledge products independently while engaging in a community of practice and an interconnected world.						
VI.A.1 Think (K-2) VI.A.1-2 Think (3) VI.A.1-3 Think (4-5) Learners follow ethical and legal guidelines for gathering and using information by: 1. Responsibly applying information, technology, and media to learning. 2. Understanding the ethical use of information, technology, and media. 3. Evaluating information for accuracy, validity, social and cultural context, and appropriateness for need.	RI.5 (K-3) W.8 SL.2 (3-5)	2C		X		
VI.B.1-2 Create Learners use valid information and reasoned conclusions to make ethical decisions in the creation of knowledge by: 1. Ethically using and reproducing others' work. 2. Acknowledging authorship and demonstrating respect for the intellectual property of others.	RI.2 W.8	2C		X		

VI.C.2 Share Learners responsibly, ethically, and legally share new information with a global community by: 2. Disseminating new knowledge through means appropriate for the intended audience.	W.8 SL.2 (3-5)	2C				
VI.D.1, 3 Learners engage with information to extend personal learning by: 1. Personalizing their use of information and information technologies.	SL.1	2AB,D	X			

Unit Links

If unit headings are formatted as a heading, then we can link a Table of Contents to better organize and provide faster access to each unit

- [Module 1: Digital Citizenship](#)
- [Module 2: Information and Media Literacy](#)
- [Module 3: Growth and Curiosity](#)
- [Module 4: Presentation of Information \(Show\)](#)

Module Title:

Module 1: Digital Citizenship

Relevant Standards: Bold indicates priority

AASL	CCS	ISTE
II.D.2-3 Grow Learners demonstrate empathy and equity in knowledge building within the global learning community by: 2. Demonstrating interest in other perspectives during learning activities. 3. Reflecting on their own place within the global learning community.	SL.1	1B
III.D.2 Grow Learners actively participate with others in learning situations by: 2. Recognizing learning as a social responsibility.	SL.1	1B
VI.D.1, 3 Learners engage with information to extend personal learning by: 1. Personalizing their use of information and information technologies.	SL.1	2AB,D

Essential Question(s):	Enduring Understanding(s):
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<ol style="list-style-type: none"> How can we be good digital citizens? What kinds of information should I keep to myself when I use the internet? What should I do if someone is mean to me online? 	<p>Examine how individuals interpret messages differently, how values and points of view are included or excluded, and how media can influence beliefs and behaviors</p> <p>Communicate effectively in diverse environments (including becoming multilingual)</p>
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Demonstration of Learning:	Pacing for Unit
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Visual Representation Performance Task	Addressed and spiraled throughout the year
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Family Overview (link below)	Integration of Technology:
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Grade 2 Family Overview	<i>Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning</i>
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Unit-specific Vocabulary:	Aligned Unit Materials, Resources, and Technology (beyond core resources):
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Digital citizen Pledge Online Private	Digital Productivity Tools
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Opportunities for Interdisciplinary Connections:		Anticipated misconceptions:	
Connect to SEL Advisory Lessons Connect to to ELA Units		<ul style="list-style-type: none"> • Ideas and information can't be stolen • There are no rules for using technology • Behaving ethically when using technology is different than 	
Connections to Prior Units:		Connections to Future Units:	
Continuation of module 1 in Grade 1		Continuation of module 1 in Grade 3	
Differentiation through <i>Universal Design for Learning</i>			
UDL Indicator		Teacher Actions:	
3.1 COMPREHENSION > Comprehension: Activate or supply background knowledge		Anchor instruction by linking to and activating relevant prior knowledge (e.g., using visual imagery, concept anchoring, or concept mastery routines)	
9.2 ENGAGEMENT > Self Regulation: Facilitate personal coping skills and strategies		Provide differentiated models, scaffolds and feedback for: <ul style="list-style-type: none"> - Managing frustration - Seeking external emotional support - Developing internal controls and coping skills - Use real life situations or simulations to demonstrate coping skills 	
Supporting Multilingual/English Learners			
Related <i>CELP standards:</i>		Learning Targets:	
2-3.2: participate in grade appropriate oral and written exchanges of information, ideas, and analyses, responding to peer, audience, or reader comments and questions.		With prompting and supports: <ul style="list-style-type: none"> • I can actively listen to others • I can participate in short conversations, discussions, and simple written exchanges using words and phrases acquired in conversations, reading, and being read to • I can take turns • I can respond to yes/no and wh- questions 	
Common Learning Experience	Learning Target	Success Criteria/ Assessment	Resources
2.DigCit.1 Media Balance	I can explain how to use technology safely and responsibly.	Identify examples and non-examples of responsible device use.	Digital Productivity Tools
2.DigCit.2 Being an Informed Critical Consumer of Media	I can recognize the kind of information that is private.	Understand that you should never give out private information online.	Digital Productivity Tools

2.DigCit.3 Safe Spaces Online	I can identify ways to respond to mean words online, using safe strategies.	Understand what online meanness can look like and how it can make people feel.	Digital Productivity Tools
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Module Title:

Module 2: Information and Media Literacy

Relevant Standards: Bold indicates priority

AASL	CCS	ISTE
I.A.1-2 Think Learners display curiosity and initiative by: 1. Formulating questions about a personal interest or a curricular topic. 2. Recalling prior and background knowledge as context for new meaning.	W.7 W.8	1A
I.B.1 Create Learners engage with new knowledge by following a process that includes: 1. Using evidence to investigate questions.	W.8	4A
IV.A.1-2 Learners act on an information need by: 1. Determining the need to gather information. 2. Identifying possible sources of information.	W.7	3C
IV.B.1-2 Create Learners gather information appropriate to the task by: 1. Seeking a variety of sources. 2. Collecting information representing diverse perspectives.	W.7 W.8	6C-D
VI.A.1 Think Learners follow ethical and legal guidelines for gathering and using information by: 1. Responsibly applying information, technology, and media to learning.	RI.5 W.8	2C
VI.B.1-2 Create Learners use valid information and reasoned conclusions to make ethical decisions in the creation of knowledge by: 1. Ethically using and reproducing others' work. 2. Acknowledging authorship and demonstrating respect for the intellectual property of others.	RI.2 W.8	2C

Essential Question(s):

1. How do I identify a wondering I have?
2. How do I use sources to answer questions?
3. How do I pick the most relevant information to answer a question?
4. How do I identify where I got my information?

Enduring Understanding(s):

Apply a fundamental understanding of the ethical/legal issues surrounding the access and use of media

Access information efficiently (time) and effectively (sources)

Evaluate information critically and competently

Demonstration of Learning:

Pacing for Unit

Note Taking Performance Task	Addressed and spiraled throughout the year
Family Overview (link below)	Integration of Technology:
Grade 2 Family Overview	<i>Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning</i>
Unit-specific Vocabulary:	Aligned Unit Materials, Resources, and Technology (beyond core resources):
Curiosity Recall Knowledge Evidence Investigate Gather Determine Identify Sources Ethical	Digital Productivity Tools Online Databases Print (Book) Materials KWL or Other Visual Organizer
Opportunities for Interdisciplinary Connections:	Anticipated misconceptions:
Connect to ELA research unit. Connect to science and social studies topics.	Everything on the internet is true. Most school projects can be finished quickly. Computers are mostly used for playing games.
Connections to Prior Units:	Connections to Future Units:
Continuation of module in Grade 1	Continuation of module in Grade 3
Differentiation through <i>Universal Design for Learning</i>	
UDL Indicator	Teacher Actions:
3.3 REPRESENTATION > Comprehension: Guide information processing and visualization	- Give explicit prompts for each step in a sequential process - Provide interactive models that guide exploration and new understandings - Introduce graduated scaffolds that support information processing strategies - Progressively release information (e.g., sequential highlighting) - Remove unnecessary distractions unless they are essential to the instructional goal
6.3 ACTION & EXPRESSION > Executive Functioning: Facilitate managing information and resources	- Provide graphic organizers and templates for data collection and organizing information - Embed prompts for categorizing and systematizing
Supporting Multilingual/English Learners	
Related <i>CELP standards:</i>	Learning Targets:
2-3.5: conduct research and evaluate and communicate findings to answer questions or solve problems.	With prompting and supports: <ul style="list-style-type: none"> I can conduct short individual or shared

		research projects to answer a question <ul style="list-style-type: none"> • I can recall information from experience • I can gather information from provided sources • I can record some information/observations in simple notes 	
Common Learning Experience	Learning Target	Success Criteria/ Assessment	Resources
2.Inquiry.1 Determining what information I need to locate.	I can state what I already know about a topic. I can create new questions to learn about the topic.	Display curiosity by formulating questions and recalling prior knowledge about topics.	Digital Productivity Tools Online Databases KWL or other Visual Organizer
2.Inquiry.2 Use books, databases such as Pebble Go, or other sources to locate information.	I can locate answers in more than one source and organize the information.	Locate facts from one or more sources. Organize information using a chart.	Digital Productivity Tools Online Databases Print Materials
2.Inquiry.3 Locate how to identify a source to show respect for the creator of the work.	I can give credit to the information creator to show respect for the work.	Use others' work respectfully by giving credit to authors.	Digital Productivity Tools Online Databases Print Materials

Module Title:

Module 3: Growth and Curiosity

Relevant Standards: Bold indicates priority

AASL	CSS	ISTE
I.A.1-2 Think Learners display curiosity and initiative by: 1. Formulating questions about a personal interest or a curricular topic. 2. Recalling prior and background knowledge as context for new meaning.	W.7 W.8	1A
I.D.1-4 Grow Learners participate in an ongoing inquiry-based process by: 1. Continually seeking knowledge. 2. Engaging in sustained inquiry. 3. Enacting new understanding through real-world connections. 4. Using reflection to guide informed decisions.	W.7	3D
II.A.3 Think Learners contribute a balanced perspective when participating in a learning community by: 3. Describing their understanding of cultural relevancy and placement within the global learning community.	RI.6	N/A
II.B.3 Create [K-3 in Nutmeg Common Experience) Learners adjust their awareness of the global learning community by: 3. Representing diverse perspectives during learning activities.	SL.2	7D
II.D.2 Grow Learners demonstrate empathy and equity in knowledge building within the global learning community by: 2. Demonstrating interest in other perspectives during learning activities.	SL.1	1B
V.A.1 Think Learners develop and satisfy personal curiosity by: 1. Reading widely and deeply in multiple formats and write and create for a variety of purposes.	RI.10 RL.10	3D
V.B.2 Create Learners construct new knowledge by: 2. Persisting through self-directed pursuits by tinkering and making.	SL.1	5C
V.C.1 Share Learners engage with the learning community by: 1. Expressing curiosity about a topic of personal interest or curricular relevance.	W.7	7B
V.C.3 Share Learners engage with the learning community by: 3. Collaboratively identifying innovative solutions to a challenge or problem.	SL.1	7C
V.D.1 Grow Learners develop through experience and reflection by: 1. Iteratively responding to challenges.	SL.1	1C

Essential Question(s):	Enduring Understanding(s):
<ol style="list-style-type: none"> 1. How do I write questions about topics I am curious about? 2. How do I explore information about different aspects of a topic I am curious about? 3. How can I grow as a reader by reading widely and deeply in multiple formats? 4. How can I construct new knowledge by persisting through self-directed pursuits by tinkering and making? 	<p>Use digital technology, communication tools, and/or networks to access, manage, integrate, evaluate, and create information in order to function in a knowledge society</p> <p>Use information accurately and creatively for the issue or problem at hand</p>
Demonstration of Learning:	Pacing for Unit
Problem Solving Performance Task	Addressed and spiraled throughout the year
Family Overview (link below)	Integration of Technology:
Grade 2 Family Overview	<i>Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning</i>
Unit-specific Vocabulary:	Aligned Unit Materials, Resources, and Technology (beyond core resources):
<p>Reflections</p> <p>Seek</p> <p>Real-world Connections</p> <p>Curiosity</p> <p>Sequences</p> <p>Loops</p> <p>Debug</p>	<p>Online Databases</p> <p>Print Materials</p> <p>Maker Materials</p> <p>Media in Multiple Formats</p>
Opportunities for Interdisciplinary Connections:	Anticipated misconceptions:
<p>Connect to ELA (literacy)</p> <p>Connect to science and social studies topics</p> <p>Connect to science/math (coding/tinkering)</p>	<p>I am only interested in one type of book</p> <p>This is too hard for me/I can't do this</p> <p>It is easy to use the internet to find the correct answer to a question</p>
Connections to Prior Units:	Connections to Future Units:
Continuation of module in Grade 1	Continuation of module in Grade 3
Differentiation through <i>Universal Design for Learning</i>	
UDL Indicator	Teacher Actions:
7.2 ENGAGEMENT > Recruiting Interest: Optimize relevance, value, and authenticity	<p>Vary activities and sources of information so that they can be:</p> <ul style="list-style-type: none"> - Personalized and contextualized to learners' lives - Culturally relevant and responsive - Socially relevant

		<ul style="list-style-type: none"> - Age and ability appropriate - Appropriate for different racial, cultural, ethnic, and gender groups - Include activities that foster the use of imagination to solve novel and relevant problems, or make sense of complex ideas in creative ways 	
8.2 ENGAGEMENT > Sustaining Effort & Persistence: Vary demands and resources to optimize challenge		<ul style="list-style-type: none"> - Differentiate the degree of difficulty or complexity within which core activities can be completed - Vary the degrees of freedom for acceptable performance - Emphasize process, effort, improvement in meeting standards as alternatives to external evaluation and competition 	
Supporting Multilingual/English Learners			
Related <u>CELP standards:</u>		Learning Targets:	
2-3.8: determine the meaning of words and phrases in oral presentations and literary and informational text.		<p>In simple oral discourse, readalouds, and written texts about familiar topics, experiences, or events:</p> <ul style="list-style-type: none"> • I can use context and visual aids to determine the meaning of words and phrases. • I can ask and answer simple questions about the meaning of words and phrases 	
Common Learning Experience	Learning Target	Success Criteria/ Assessment	Resources
2.Grow.1 KWL Charts write questions prior to reading or listening to books	I can show that I am interested in learning new information.	Display curiosity by formulating questions and recalling prior knowledge about topics.	Online Databases Print Materials Media in Multiple Formats
2.Grow.2 Read self - selected literature and articles (e.g. online databases, eBooks, library books, Award books)	<p>I can read books with different genres and topics.</p> <p>I can respond to questions about my reading.</p> <p>I can adjust my awareness of diverse perspectives during learning activities.</p> <p>I can demonstrate empathy and equity in other perspectives during learning activities.</p>	Read a variety of books and respond to questions verbally and in writing.	Online Databases Print Materials Media in Multiple Formats
2.Grow.3 Coding Tinkering and Making	I can persevere through tinkering and making challenges.	Complete a variety of challenges involving coding, tinkering and making.	Maker Materials Media in Multiple Formats

	I can use logical thinking to solve a problem.		
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Module Title:

Module 4: Presentation of Information (Show)

Relevant Standards: Bold indicates priority

AASL	CCS	ISTE
I.B.3 Create Learners engage with new knowledge by following a process that includes: 3. Generating products that illustrate learning.	W.6	4A
II.B.3 Create [K-3 in Nutmeg Common Experience] Learners adjust their awareness of the global learning community by: 3. Representing diverse perspectives during learning activities.	SL.1	7D
III.B.1 Create Learners participate in personal, social, and intellectual networks by: 1. Using a variety of communication tools and resources.	W.6	1C
III.D.1 Grow Learners actively participate with others in learning situations by: 1. Actively contributing to group discussions.	SL.1	7C
V.A.1 Think Learners develop and satisfy personal curiosity by: 1. Reading widely and deeply in multiple formats and write and create for a variety of purposes.	RI.10 RL.10	3D

Essential Question(s):	Enduring Understanding(s):
<ol style="list-style-type: none"> How do I interact with others to discuss second grade topics? How can I use productivity tools to “show what I know”? 	<p>Use digital technology, communication tools, and/or networks to access, manage, integrate, evaluate, and create information in order to function in a knowledge society</p> <p>Use information accurately and creatively for the issue or problem at hand</p>
Demonstration of Learning:	Pacing for Unit
Digital Artifact Creation	Addressed and spiraled throughout the year
Family Overview (link below)	Integration of Technology:
Grade 2 Family Overview	<i>Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning</i>
Unit-specific Vocabulary:	Aligned Unit Materials, Resources, and Technology (beyond core resources):

Process Products Community Audience Share	<i>Digital Productivity Tools</i>		
Opportunities for Interdisciplinary Connections:	Anticipated misconceptions:		
Connect to ELA units. Connect to science and social studies topics.	Students can't work on the same document simultaneously The teacher is the only audience of finished work.		
Connections to Prior Units:	Connections to Future Units:		
Continuation of module in Grade 1	Continuation of module in Grade 3		
Differentiation through <i>Universal Design for Learning</i>			
UDL Indicator	Teacher Actions:		
5.1 ACTION 7 EXPRESSION > Expression & Communication: Use multiple media for communication	<ul style="list-style-type: none"> - Compose in multiple media such as text, speech, drawing, illustration, comics, storyboards, design, film, music, dance/movement, visual art, sculpture, or video - Use physical manipulatives (e.g., blocks, 3D models) - Use interactive web tools (e.g., storyboards, comic strips, animation presentations) - Solve problems using a variety of strategies 		
Supporting Multilingual/English Learners			
Related <i>CELP standards:</i>	Learning Targets:		
2-3.3: speak and write about grade-appropriate complex literary and informational texts and topics	With prompting and supports: <ul style="list-style-type: none"> • I can deliver basic oral presentations... • I can write short texts with drawings or illustrations... about familiar texts, topics, experiences, or events.		
Common Learning Experience	Learning Target	Success Criteria/ Assessment	Resources
2.Show.1 Use digital productivity tools to showcase information and learning	I can show my learning in different ways.	Generate products that illustrate learning.	Digital Productivity Tools
2.Show.2 Use toolbar tools to make a presentation appealing	I can add images and change the font and background on a presentation slide.	Create a slide to show learning.	Digital Productivity Tools
2.Show.3 Share work digitally or in groups to discuss	I can draw, write, type or use video to share learning with a group.	Use a variety of tools to share learning and participate in networking.	Digital Productivity Tools

products			
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Course Title:	Content Area:	Grade Level:	Credit (if applicable)			
Library Media Science	Library Media	Grade 3	N/A			
Course Description:						
<p>The school library media programs of Bristol Public Schools facilitate opportunities for students and faculty to become lifelong learners who thrive in complex learning environments. Through instructional strategies designed to infuse inquiry and technology as tools for learning, students will develop skills to interpret and develop new understandings, seek diverse perspectives, create new knowledge, and grow as ethical, digital citizens. Through equitable access to reading and information resources, the library media programs promote lifelong reading in a safe environment conducive to learning.</p>						
Aligned Core Resources:			Connection to the BPS Vision of the Graduate			
N/A			<p>Media Literacy</p> <ul style="list-style-type: none"> • Understand both how and why media messages are constructed, and for what purpose • Examine how individuals interpret messages differently, how values and points of view are included or excluded, and how media can influence beliefs and behaviors • Apply a fundamental understanding of the ethical/legal issues surrounding the access and use of media <p>Communications</p> <ul style="list-style-type: none"> • Communicate effectively in diverse environments (including becoming multilingual) <p>Communications and Technology Literacy</p> <ul style="list-style-type: none"> • Use digital technology, communication tools, and/or networks to access, manage, integrate, evaluate, and create information in order to function in a knowledge society <p>Information Literacy</p> <ul style="list-style-type: none"> • Access information on efficiently (time) and effectively (sources) • Evaluate information critically and competently • Use information accurately and creatively for the issue or problem at hand • Manage the flow of information from a wide variety of sources • Apply a fundamental understanding of the ethical/ legal issues surrounding the access and use of information 			
Additional Course Information: <i>Knowledge/Skill Dependent courses/prerequisites</i>			Link to Completed Equity Audit			
N/A			LMS Curriculum Audit			
Standard Matrix						
AASL	CCS	ISTE	Module	Module	Module	Module

			1	2	3	4
I. Inquire (AASL)						
Build new knowledge by inquiring, thinking critically, identifying problems, and developing strategies for solving problems.						
I.A.1-2 Think Learners display curiosity and initiative by: 1. Formulating questions about a personal interest or a curricular topic. 2. Recalling prior and background knowledge as context for new meaning.	W.7 W.8	1A, (K-5) 3A-B (4-5)		X	X	
I.B.1 Create (1-5) Learners engage with new knowledge by following a process that includes: 1. Using evidence to investigate questions.	W.8	4A		X		
I.B.3 Create (2-5) Learners engage with new knowledge by following a process that includes: 3. Generating products that illustrate learning.	W.6 (2-5)	4A				X
I.D.1 (K-1) I.D.1-4 Grow (2-5) Learners participate in an ongoing inquiry-based process by: 1. Continually seeking knowledge. 2. Engaging in sustained inquiry. 3. Enacting new understanding through real-world connections. 4. Using reflection to guide informed decisions.	W.7	3D			X	
II. Include (AASL)						
Demonstrate an understanding of and commitment to inclusiveness and respect for diversity in the learning community.						
II.A.3 Think Learners contribute a balanced perspective when participating in a learning community by: 3. Describing their understanding of cultural relevancy and placement within the global learning community.	RI.6	N/A			X	
II.B.3 Create [K-3 in Nutmeg Common Experience] Learners adjust their awareness of the global learning community by: 3. Representing diverse perspectives during learning activities.	SL.1 in K-2, W.6 in 3-5	7D			X	X
II.D.2 Grow Learners demonstrate empathy and equity in knowledge	SL.1	1B	X		X	

building within the global learning community by: 2. Demonstrating interest in other perspectives during learning activities.						
II.D.3 Grow Learners demonstrate empathy and equity in knowledge building within the global learning community by: 3. Reflecting on their own place within the global learning community.	SL.1	1B	X			
III. Collaborate (AASL) Work effectively with others to broaden perspectives and work toward common goals						
III.B.1 Create Learners participate in personal, social, and intellectual networks by: 1. Using a variety of communication tools and resources.	W.6 (2-5)	1C				X
III.D.1 Grow Learners actively participate with others in learning situations by: 1. Actively contributing to group discussions.	SL.1	7C				X
III.D.2 Grow Learners actively participate with others in learning situations by: 2. Recognizing learning as a social responsibility.	SL.1	1B	X			
IV. CURATE (AASL) Make meaning for oneself and others by collecting, organizing, and sharing resources of personal relevance.						
IV.A.1-2 Think (K-3) IV.A.1-3 (GRADES 4-5) Learners act on an information need by: 1. Determining the need to gather information. 2. Identifying possible sources of information. 3. Making critical choices about information sources to use.	W.7	3C		X		
IV.B.1-2 Create (K-3) IV.B.1-4 Create (GRADES 4-5) Learners gather information appropriate to the task by: 1. Seeking a variety of sources. 2. Collecting information representing diverse perspectives. 3. Systematically questioning and assessing the validity and accuracy of information. 4. Organizing information by priority, topic, or other systematic scheme.	W.7 W.8	6C-D		X		
V. EXPLORE (AASL)						

Discover and innovate in a growth mindset developed through experience and reflection.						
V.A.1 Think Learners develop and satisfy personal curiosity by: 1. Reading widely and deeply in multiple formats and write and create for a variety of purposes.	RI.10 RL.10	3D			X	X
V.A.3 Think (3-5) Learners develop and satisfy personal curiosity by: 3. Engaging in inquiry-based processes for personal growth.	W.7	6C		X		
V.B.2 Create [Maker/Tinker, Coding, Indi, LittleBits, Bolts] Learners construct new knowledge by: 2. Persisting through self-directed pursuits by tinkering and making.	SL.1	5C			X	
V.C.1 Share Learners engage with the learning community by: 1. Expressing curiosity about a topic of personal interest or curricular relevance.	W.7	7B			X	
V.C.3 Share [Collaborating w/Indi, LittleBits, Bolts] Learners engage with the learning community by: 3. Collaboratively identifying innovative solutions to a challenge or problem.	SL.1	7C			X	
V.D.1 Grow [iteration] Learners develop through experience and reflection by: 1. Iteratively responding to challenges.	SL.1	1C			X	
VI. ENGAGE (AASL) Demonstrate safe, legal, and ethical creating and sharing of knowledge products independently while engaging in a community of practice and an interconnected world.						
VI.A.1 Think (K-2) VI.A.1-2 Think (3) VI.A.1-3 Think (4-5) Learners follow ethical and legal guidelines for gathering and using information by: 1. Responsibly applying information, technology, and media to learning. 2. Understanding the ethical use of information, technology, and media. 3. Evaluating information for accuracy, validity, social and cultural context, and appropriateness for need.	RI.5 (K-3) W.8 SL.2 (3-5)	2C		X		
VI.B.1-2 Create Learners use valid information and reasoned conclusions to make ethical decisions in the creation of knowledge by:	RI.2 W.8	2C		X		

1. Ethically using and reproducing others' work. 2. Acknowledging authorship and demonstrating respect for the intellectual property of others.						
VI.C.2 Share Learners responsibly, ethically, and legally share new information with a global community by: 2. Disseminating new knowledge through means appropriate for the intended audience.	W.8 SL.2 (3-5)	2C				X
VI.D.1, 3 Learners engage with information to extend personal learning by: 1. Personalizing their use of information and information technologies.	SL.1	2AB,D	X			

Unit Links

If unit headings are formatted as a heading, then we can link a Table of Contents to better organize and provide faster access to each unit

[Module 1: Digital Citizenship](#)

[Module 2: Information and Media Literacy](#)

[Module 3: Growth and Curiosity](#)

[Module 4: Presentation of Information \(Show\)](#)

Module Title:		
Module 1: Digital Citizenship		
Relevant Standards: Bold indicates priority		
AASL	CCS	ISTE
II.D.2-3 Grow Learners demonstrate empathy and equity in knowledge building within the global learning community by: 2. Demonstrating interest in other perspectives during learning activities. 3. Reflecting on their own place within the global learning community.	SL.1	1B
III.D.2 Grow Learners actively participate with others in learning situations by: 2. Recognizing learning as a social responsibility.	SL.1	1B
VI.D.1, 3 Learners engage with information to extend personal learning by: 1. Personalizing their use of information and information technologies.	SL.1	2AB,D
Essential Question(s):	Enduring Understanding(s):	
<ol style="list-style-type: none"> How does what I post online affect my identity? What should you do when someone uses mean or hurtful language on the internet? Why do people alter digital photos and videos? 	<p>Evaluate information critically and competently</p> <p>Examine how individuals interpret messages differently, how values and points of view are included or excluded, and how media can influence beliefs and behaviors</p> <p>Understand both how and why media messages are constructed, and for what purpose</p> <p>Communicate effectively in diverse environments (including becoming multilingual)</p>	
Demonstration of Learning:	Pacing for Unit	
Scenario based performance task	Addressed and spiraled throughout the year	
Family Overview (link below)	Integration of Technology:	
Grade 3 Family Overview	<i>Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning</i>	
Unit-specific Vocabulary:	Aligned Unit Materials, Resources, and Technology (beyond core resources):	
Empathy	Digital Productivity Tools	

Interpret Assumption Identity Selfie Advertising Alter Persuade Photo retouching	
Opportunities for Interdisciplinary Connections:	Anticipated misconceptions:
Connect to SEL Advisory Lessons Connect to to ELA Units	School Google accounts are not visible to teachers and are okay for personal use Cyberbullying from home can't get someone into trouble Images and Videos are always real
Connections to Prior Units:	Connections to Future Units:
Continuation of module 1 in Grade 2	Continuation of module 1 in Grade 4
Differentiation through Universal Design for Learning	
UDL Indicator	Teacher Actions:
3.1 COMPREHENSION > Comprehension: Activate or supply background knowledge	Anchor instruction by linking to and activating relevant prior knowledge (e.g., using visual imagery, concept anchoring, or concept mastery routines)
9.2 ENGAGEMENT > Self Regulation: Facilitate personal coping skills and strategies	Provide differentiated models, scaffolds and feedback for: - Managing frustration - Seeking external emotional support - Developing internal controls and coping skills - Use real life situations or simulations to demonstrate coping skills
Supporting Multilingual/English Learners	
Related CELP standards:	Learning Targets:
2-3.2: participate in grade appropriate oral and written exchanges of information, ideas, and analyses, responding to peer, audience, or reader comments and questions.	With prompting and supports: <ul style="list-style-type: none"> • I can actively listen to others • I can participate in short conversations, discussions, and simple written exchanges using words and phrases acquired in conversations, reading, and being read to, and academic and domain specific words • I can take turns • I can respond to yes/no and wh- questions

Common Learning Experience	Learning Target	Success Criteria/ Assessment	Resources
3.DigCit.1 Media Balance	I can identify ways I can post online to best reflect who I am.	<p>Consider how posting selfies or other images will lead others to make assumptions about them.</p> <p>Reflect on the most important parts of their unique identity.</p>	Digital Productivity Tools
3.DigCit.2 Being Informed Critical Consumer of Media	I can analyze altered photos and videos to try to determine why they were altered.	<p>Recognize that photos and videos can be altered digitally.</p> <p>Identify different reasons why someone might alter a photo or video.</p>	Digital Productivity Tools
3.DigCit.3 Safe Spaces Online	Identify ways to respond to mean words online, using safe strategies.	<p>Understand that it's important to think about the words we use, because everyone interprets things differently.</p> <p>Decide what kinds of statements are OK to say online and which are not.</p>	Digital Productivity Tools

Module Title:

Module 2: Information and Media Literacy

Relevant Standards: Bold indicates priority

AASL	CCS	ISTE
I.A.1-2 Think Learners display curiosity and initiative by: 1. Formulating questions about a personal interest or a curricular topic. 2. Recalling prior and background knowledge as context for new meaning.	W.7, W.8	1A
I.B.1 Create Learners engage with new knowledge by following a process that includes: 1. Using evidence to investigate questions.	W.8	4A
IV.A.1-2 Think Learners act on an information need by: 1. Determining the need to gather information. 2. Identifying possible sources of information.	W.7	3C
IV.B.1-2 Create Learners gather information appropriate to the task by: 1. Seeking a variety of sources. 2. Collecting information representing diverse perspectives.	W.7, W.8	6C-D
V.A.3 Think Learners develop and satisfy personal curiosity by: 3. Engaging in inquiry-based processes for personal growth.	W.7	6C
VI.A.1-2 Think Learners follow ethical and legal guidelines for gathering and using information by: 1. Responsibly applying information, technology, and media to learning. 2. Understanding the ethical use of information, technology, and media.	RI.5, W.8, SL.2	2C
VI.B.1-2 Create Learners use valid information and reasoned conclusions to make ethical decisions in the creation of knowledge by: 1. Ethically using and reproducing others' work. 2. Acknowledging authorship and demonstrating respect for the intellectual property of others.	RI.2, W.8	2C

Essential Question(s):

1. How do I use text features and search tools to locate information relevant to a given topic efficiently?
2. How do I conduct a short research project to build knowledge about a topic?
3. How can I document what I learn about a topic by taking notes?

Enduring Understanding(s):

Apply a fundamental understanding of the ethical/legal issues surrounding the access and use of media

Access information efficiently (time) and effectively (sources)

Evaluate information critically and competently

<p>4. How can I sort evidence into provided categories?</p> <p>5. How do I give credit for someone else's work?</p>	
Demonstration of Learning:	Pacing for Unit
Research Process Performance Task	Addressed and spiraled throughout the year
Family Overview (link below)	Integration of Technology:
Grade 3 Family Overview	<i>Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning</i>
Unit-specific Vocabulary:	Aligned Unit Materials, Resources, and Technology (beyond core resources):
<p>Relevant Source Database Ethical Legal Technology Media Accurate Valid Plagiarism Citation Cite the Source</p>	<p>Digital Productivity Tools Online Databases</p>
Opportunities for Interdisciplinary Connections:	Anticipated misconceptions:
<p>Connect to ELA research unit. Connect to science and social studies topics.</p>	<p>Copying and pasting a URL is the proper way to give credit.</p> <p>It's okay to take notes by copying word for word.</p>
Connections to Prior Units:	Connections to Future Units:
Continuation of module in Grade 2	Continuation of module in Grade 4
Differentiation through Universal Design for Learning	
UDL Indicator	Teacher Actions:
3.3 REPRESENTATION > Comprehension: Guide information processing and visualization	<ul style="list-style-type: none"> - Give explicit prompts for each step in a sequential process - Provide interactive models that guide exploration and new understandings - Introduce graduated scaffolds that support information processing strategies - Progressively release information (e.g., sequential highlighting) - Remove unnecessary distractions unless they are essential to the instructional goal

6.3 ACTION & EXPRESSION > Executive Functioning: Facilitate managing information and resources		- Provide graphic organizers and templates for data collection and organizing information - Embed prompts for categorizing and systematizing - Provide checklists and guides for note-taking	
Supporting Multilingual/English Learners			
Related <i>CELP standards:</i>		Learning Targets:	
2-3.5: conduct research and evaluate and communicate findings to answer questions or solve problems.		With prompting and supports: <ul style="list-style-type: none"> • I can conduct a research project to answer a question. • I can gather information from provided sources • I can record some information/observations in simple notes 	
Common Learning Experience	Learning Target	Success Criteria/ Assessment	Resources
3.Inquiry.1 Information Seeking Strategies -Databases - Keyword searching	I can carefully choose information to answer my questions.	Given a question, thoughtfully select information to address the topic.	Digital Productivity Tools Online Databases
3.Inquiry.2 Take organized notes to answer question	I can take notes without copying to answer an information need.	Gather information from print and digital sources. Take brief notes on sources and sort evidence into provided categories.	Digital Productivity Tools Online Databases
3.Inquiry.3 Show respect for the creator of the work	I can give credit to the information creator to show respect for the work.	Use others' work respectfully by giving credit to authors.	Digital Productivity Tools Online Databases Print Materials

Module Title:

Module 3: Growth and Curiosity

Relevant Standards: Bold indicates priority

AASL	CSS	ISTE
I.A.1-2 Think Learners display curiosity and initiative by: 1. Formulating questions about a personal interest or a curricular topic. 2. Recalling prior and background knowledge as context for new meaning.	W.7 W.8	1A
I.D.1-4 Grow Learners participate in an ongoing inquiry-based process by: 1. Continually seeking knowledge. 2. Engaging in sustained inquiry. 3. Enacting new understanding through real-world connections. 4. Using reflection to guide informed decisions.	W.7	3D
II.A.3 Think Learners contribute a balanced perspective when participating in a learning community by: 3. Describing their understanding of cultural relevancy and placement within the global learning community.	RI.6	N/A
II.B.3 Create [K-3 in Nutmeg Common Experience) Learners adjust their awareness of the global learning community by: 3. Representing diverse perspectives during learning activities.	W.6	7D
II.D.2 Grow Learners demonstrate empathy and equity in knowledge building within the global learning community by: 2. Demonstrating interest in other perspectives during learning activities.	SL.1	1B
V.A.1 Think Learners develop and satisfy personal curiosity by: 1. Reading widely and deeply in multiple formats and write and create for a variety of purposes.	RI.10 RL.10	3D
V.B.2 Create Learners construct new knowledge by: 2. Persisting through self-directed pursuits by tinkering and making.	SL.1	5C
V.C.1 Share Learners engage with the learning community by: 1. Expressing curiosity about a topic of personal interest or curricular relevance.	W.7	7B
V.C.3 Share Learners engage with the learning community by: 3. Collaboratively identifying innovative solutions to a challenge or problem.	SL.1	7C
V.D.1 Grow Learners develop through experience and reflection by: 1. Iteratively responding to challenges.	SL.1	1C

Essential Question(s):	Enduring Understanding(s):
<ol style="list-style-type: none"> How do I make decisions on what to explore to fulfill a curiosity? How can I grow as a reader by reading widely and deeply in multiple formats? How can I construct new knowledge by persisting through self-directed pursuits by tinkering and making? 	<p>Use digital technology, communication tools, and/or networks to access, manage, integrate, evaluate, and create information in order to function in a knowledge society</p> <p>Use information accurately and creatively for the issue or problem at hand</p>
Demonstration of Learning:	Pacing for Unit
Problem Solving Performance Task	Addressed and spiraled throughout the year
Family Overview (link below)	Integration of Technology:
Grade 3 Family Overview	<i>Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning</i>
Unit-specific Vocabulary:	Aligned Unit Materials, Resources, and Technology (beyond core resources):
<p>Catalog Inquire Inquiry Real-world Connection Reflection Genre Circuit Input Output Block (coding) Sequences Loops Debug Alignment Rotate</p>	<p>Online Databases Print Materials Maker Materials Media in Multiple Formats</p>
Opportunities for Interdisciplinary Connections:	Anticipated misconceptions:
<p>Connect to ELA (literacy) Connect to science and social studies topics Connect to science/math (circuits/coding/tinkering) Connect to math and art (digital drawing)</p>	<p>I am only interested in one type of book</p> <p>This is too hard for me/I can't do this</p>
Connections to Prior Units:	Connections to Future Units:
Continuation of module in Grade 2	Continuation of module in Grade 4
Differentiation through <i>Universal Design for Learning</i>	
UDL Indicator	Teacher Actions:

7.2 ENGAGEMENT > Recruiting Interest: Optimize relevance, value, and authenticity		Vary activities and sources of information so that they can be: - Personalized and contextualized to learners' lives - Culturally relevant and responsive - Socially relevant - Age and ability appropriate - Appropriate for different racial, cultural, ethnic, and gender groups - Include activities that foster the use of imagination to solve novel and relevant problems, or make sense of complex ideas in creative ways	
8.2 ENGAGEMENT > Sustaining Effort & Persistence: Vary demands and resources to optimize challenge		- Differentiate the degree of difficulty or complexity within which core activities can be completed - Vary the degrees of freedom for acceptable performance - Emphasize process, effort, improvement in meeting standards as alternatives to external evaluation and competition	
Supporting Multilingual/English Learners			
Related CELP standards:		Learning Targets:	
2-3.8: determine the meaning of words and phrases in oral presentations and literary and informational text.		In simple oral discourse, readalouds, and written texts about familiar topics, experiences, or events: <ul style="list-style-type: none"> I can use context and visual aids to determine the meaning of words and phrases. I can ask and answer simple questions about the meaning of words and phrases 	
Common Learning Experience	Learning Target	Success Criteria/ Assessment	Resources
3.Grow.1 Use an online catalog to find materials on any topic of interest	I can think of things I already know to help me with new information. I can use an organizational system to locate materials.	Use search skills to drive deeper inquiry into a topic of interest or a curricular topic.	Online Databases Print Materials Media in Multiple Formats
3.Grow.2 Opportunities to self-select and read a variety of books, texts (e.g. Book tasting, Search a topic of interest, Award books	I can use inquiry strategies to keep learning about topics of interest. I can read books with different genres and topics and respond to questions about my reading I can adjust my awareness of diverse perspectives	Use strategies to engage in ongoing inquiry. Read a variety of books and respond to questions verbally and in writing.	Online Databases Print Materials Media in Multiple Formats

	<p>during learning activities.</p> <p>I can demonstrate empathy and equity in other perspectives during learning activities.</p>		
<p>3.Grow.3 Coding</p> <p>Tinkering and Making</p> <p>Digital Drawing</p>	<p>I can persevere through tinkering and making challenges.</p> <p>I can use logical thinking to solve a problem.</p>	<p>Complete a variety of challenges involving coding, tinkering, making and digital drawing.</p>	<p>Maker Materials Media in Multiple Formats</p>

Module Title:		
Module 4: Presentation of Information (Show)		
Relevant Standards: Bold indicates priority		
AASL	CCS	ISTE
I.B.3 Create Learners engage with new knowledge by following a process that includes: 3. Generating products that illustrate learning.	W.6	4A
II.B.3 Create [K-3 in Nutmeg Common Experience] Learners adjust their awareness of the global learning community by: 3. Representing diverse perspectives during learning activities.	W.6	7D
III.B.1 Create Learners participate in personal, social, and intellectual networks by: 1. Using a variety of communication tools and resources.	W.6	1C
III.D.1 Grow Learners actively participate with others in learning situations by: 1. Actively contributing to group discussions.	SL.1	7C
V.A.1 Think Learners develop and satisfy personal curiosity by: 1. Reading widely and deeply in multiple formats and write and create for a variety of purposes.	RI.10 RL.10	3D
VI.C.2 Share Learners responsibly, ethically, and legally share new information with a global community by: 2. Disseminating new knowledge through means appropriate for the intended audience.	W.8 SL.2	2C
Essential Question(s):	Enduring Understanding(s):	
<ol style="list-style-type: none"> How do I interact with others to discuss third grade topics? How do I use productivity tools to create a product? 	<p>Use digital technology, communication tools, and/or networks to access, manage, integrate, evaluate, and create information in order to function in a knowledge society</p> <p>Use information accurately and creatively for the issue or problem at hand</p> <p>Manage the flow of information from a wide variety of sources</p> <p>Apply a fundamental understanding of the ethical/ legal issues surrounding the access and use of information</p>	
Demonstration of Learning:	Pacing for Unit	
Digital Artifact Creation	Addressed and spiraled throughout the year	

Family Overview (link below)		Integration of Technology:	
Grade 3 Family Overview		<i>Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning</i>	
Unit-specific Vocabulary:		Aligned Unit Materials, Resources, and Technology (beyond core resources):	
Process Product Feedback Audience Community		<i>Digital Productivity Tools</i>	
Opportunities for Interdisciplinary Connections:		Anticipated misconceptions:	
Connect to ELA units. Connect to science and social studies topics.		The teacher is the only audience of finished work.	
Connections to Prior Units:		Connections to Future Units:	
Continuation of module in Grade 2		Continuation of module in Grade 4	
Differentiation through <i>Universal Design for Learning</i>			
UDL Indicator		Teacher Actions:	
5.1 ACTION 7 EXPRESSION > Expression & Communication: Use multiple media for communication		<ul style="list-style-type: none"> - Compose in multiple media such as text, speech, drawing, illustration, comics, storyboards, design, film, music, dance/movement, visual art, sculpture, or video - Use physical manipulatives (e.g., blocks, 3D models) - Use interactive web tools (e.g., storyboards, comic strips, animation presentations) - Solve problems using a variety of strategies 	
Supporting Multilingual/English Learners			
Related <i>CELP standards:</i>		Learning Targets:	
2-3.3: speak and write about grade-appropriate complex literary and informational texts and topics		With prompting and supports: <ul style="list-style-type: none"> • I can deliver short oral presentations... • I can write texts with drawings or illustrations... • I can use academic and domain specific words... about familiar texts, topics, and experiences.	
Common Learning Experience	Learning Target	Success Criteria/ Assessment	Resources
3.Show.1 Use digital productivity tools to showcase information and learning	I can show my learning in different ways.	Create a product that showcases learning.	Digital Productivity Tools
3.Show.2	I can draw, write, type or use	Use a variety of tools to	Digital Productivity Tools

Share work digitally or in groups to discuss products	video to share learning with a group.	share learning and participate in networking.	
3.Show.3 Include a reference to where information was found during creation of a product.	I can responsibly share new information in the way that works best for my audience.	Ethically and legally share new information through best means for the intended audience.	Digital Productivity Tools

Course Title:	Content Area:	Grade Level:	Credit (if applicable)			
Library Media Science	Library Media	Grade 4	N/A			
Course Description:						
<p>The school library media programs of Bristol Public Schools facilitate opportunities for students and faculty to become lifelong learners who thrive in complex learning environments. Through instructional strategies designed to infuse inquiry and technology as tools for learning, students will develop skills to interpret and develop new understandings, seek diverse perspectives, create new knowledge, and grow as ethical, digital citizens. Through equitable access to reading and information resources, the library media programs promote lifelong reading in a safe environment conducive to learning.</p>						
Aligned Core Resources:			Connection to the BPS Vision of the Graduate			
N/A			<p>Media Literacy</p> <ul style="list-style-type: none"> • Understand both how and why media messages are constructed, and for what Purpose • Examine how individuals interpret messages differently, how values and points of view are included or excluded, and how media can influence beliefs and behaviors • Apply a fundamental understanding of the ethical/legal issues surrounding the access and use of media <p>Communications</p> <ul style="list-style-type: none"> • Communicate effectively in diverse environments (including becoming multilingual) <p>Communications and Technology Literacy</p> <ul style="list-style-type: none"> • Use digital technology, communication tools, and/or networks to access, manage, integrate, evaluate, and create information in order to function in a knowledge society <p>Information Literacy</p> <ul style="list-style-type: none"> • Access information on efficiently (time) and effectively (sources) • Evaluate information critically and competently • Use information accurately and creatively for the issue or problem at hand • Manage the flow of information from a wide variety of sources • Apply a fundamental understanding of the ethical/ legal issues surrounding the access and use of information 			
Additional Course Information: <i>Knowledge/Skill Dependent courses/prerequisites</i>			Link to Completed Equity Audit			
N/A			LMS Curriculum Audit			
Standard Matrix						
AASL	CCS	ISTE	Module	Module	Module	Module

			1	2	3	4
I. Inquire (AASL)						
Build new knowledge by inquiring, thinking critically, identifying problems, and developing strategies for solving problems.						
I.A.1-2 Think Learners display curiosity and initiative by: 1. Formulating questions about a personal interest or a curricular topic. 2. Recalling prior and background knowledge as context for new meaning.	W.7 W.8	1A, (K-5) 3A-B (4-5)		X	X	
I.B.1 Create (1-5) Learners engage with new knowledge by following a process that includes: 1. Using evidence to investigate questions.	W.8	4A		X		
I.B.3 Create (2-5) Learners engage with new knowledge by following a process that includes: 3. Generating products that illustrate learning.	W.6 (2-5)	4A				X
I.D.1 (K-1) I.D.1-4 Grow (2-5) Learners participate in an ongoing inquiry-based process by: 1. Continually seeking knowledge. 2. Engaging in sustained inquiry. 3. Enacting new understanding through real-world connections. 4. Using reflection to guide informed decisions.	W.7	3D			X	
II. Include (AASL)						
Demonstrate an understanding of and commitment to inclusiveness and respect for diversity in the learning community.						
II.A.3 Think Learners contribute a balanced perspective when participating in a learning community by: 3. Describing their understanding of cultural relevancy and placement within the global learning community.	RI.6	N/A			X	
II.B.3 Create [K-3 in Nutmeg Common Experience] Learners adjust their awareness of the global learning community by: 3. Representing diverse perspectives during learning activities.	SL.1 in K-2, W.6 in 3-5	7D			X	X
II.D.2 Grow Learners demonstrate empathy and equity in knowledge	SL.1	1B	X		X	

building within the global learning community by: 2. Demonstrating interest in other perspectives during learning activities.						
II.D.3 Grow Learners demonstrate empathy and equity in knowledge building within the global learning community by: 3. Reflecting on their own place within the global learning community.	SL.1	1B	X			
III. Collaborate (AASL) Work effectively with others to broaden perspectives and work toward common goals						
III.B.1 Create Learners participate in personal, social, and intellectual networks by: 1. Using a variety of communication tools and resources.	W.6 (2-5)	1C				X
III.D.1 Grow Learners actively participate with others in learning situations by: 1. Actively contributing to group discussions.	SL.1	7C				X
III.D.2 Grow Learners actively participate with others in learning situations by: 2. Recognizing learning as a social responsibility.	SL.1	1B	X			
IV. CURATE (AASL) Make meaning for oneself and others by collecting, organizing, and sharing resources of personal relevance.						
IV.A.1-2 Think (K-3) IV.A.1-3 (GRADES 4-5) Learners act on an information need by: 1. Determining the need to gather information. 2. Identifying possible sources of information. 3. Making critical choices about information sources to use.	W.7	3C		X		
IV.B.1-2 Create (K-3) IV.B.1-4 Create (GRADES 4-5) Learners gather information appropriate to the task by: 1. Seeking a variety of sources. 2. Collecting information representing diverse perspectives. 3. Systematically questioning and assessing the validity and accuracy of information. 4. Organizing information by priority, topic, or other systematic scheme.	W.7 W.8	6C-D		X		
V. EXPLORE (AASL)						

Discover and innovate in a growth mindset developed through experience and reflection.						
V.A.1 Think Learners develop and satisfy personal curiosity by: 1. Reading widely and deeply in multiple formats and write and create for a variety of purposes.	RI.10 RL.10	3D			X	X
V.A.3 Think (3-5) Learners develop and satisfy personal curiosity by: 3. Engaging in inquiry-based processes for personal growth.	W.7	6C		X		
V.B.2 Create [Maker/Tinker, Coding, Indi, LittleBits, Bolts] Learners construct new knowledge by: 2. Persisting through self-directed pursuits by tinkering and making.	SL.1	5C			X	
V.C.1 Share Learners engage with the learning community by: 1. Expressing curiosity about a topic of personal interest or curricular relevance.	W.7	7B			X	
V.C.3 Share [Collaborating w/Indi, LittleBits, Bolts] Learners engage with the learning community by: 3. Collaboratively identifying innovative solutions to a challenge or problem.	SL.1	7C			X	
V.D.1 Grow [iteration] Learners develop through experience and reflection by: 1. Iteratively responding to challenges.	SL.1	1C			X	
VI. ENGAGE (AASL) Demonstrate safe, legal, and ethical creating and sharing of knowledge products independently while engaging in a community of practice and an interconnected world.						
VI.A.1 Think (K-2) VI.A.1-2 Think (3) VI.A.1-3 Think (4-5) Learners follow ethical and legal guidelines for gathering and using information by: 1. Responsibly applying information, technology, and media to learning. 2. Understanding the ethical use of information, technology, and media. 3. Evaluating information for accuracy, validity, social and cultural context, and appropriateness for need.	RI.5 (K-3) W.8 SL.2 (3-5)	2C		X		
VI.B.1-2 Create Learners use valid information and reasoned conclusions to make ethical decisions in the creation of knowledge by:	RI.2 W.8	2C		X		

1. Ethically using and reproducing others' work. 2. Acknowledging authorship and demonstrating respect for the intellectual property of others.						
VI.C.2 Share Learners responsibly, ethically, and legally share new information with a global community by: 2. Disseminating new knowledge through means appropriate for the intended audience.	W.8 SL.2 (3-5)	2C				X
VI.D.1, 3 Learners engage with information to extend personal learning by: 1. Personalizing their use of information and information technologies.	SL.1	2AB,D	X			

Unit Links

If unit headings are formatted as a heading, then we can link a Table of Contents to better organize and provide faster access to each unit

[Module 1: Digital Citizenship](#)

[Module 2: Information and Media Literacy](#)

[Module 3: Growth and Curiosity](#)

[Module 4: Presentation of Information \(Show\)](#)

Module Title:

Module 1: Digital Citizenship

Relevant Standards: Bold indicates priority

AASL	CCS	ISTE
II.D.2-3 Grow Learners demonstrate empathy and equity in knowledge building within the global learning community by: 2. Demonstrating interest in other perspectives during learning activities. 3. Reflecting on their own place within the global learning community.	SL.1	1B
III.D.2 Grow	SL.1	1B

Learners actively participate with others in learning situations by:			
2. Recognizing learning as a social responsibility.			
VI.D.1, 3		SL.1	2AB, D
Learners engage with information to extend personal learning by:			
1. Personalizing their use of information and information technologies.			
Essential Question(s):		Enduring Understanding(s):	
<ol style="list-style-type: none"> 1. What information about you is safe to share online? 2. How does our online activity affect the digital footprints of ourselves and others? 3. How can we be upstanders when we see cyberbullying? 		<p>Examine how individuals interpret messages differently, how values and points of view are included or excluded, and how media can influence beliefs and behaviors</p> <p>Communicate effectively in diverse environments (including becoming multilingual)</p>	
Demonstration of Learning:		Pacing for Unit	
Scenario based performance task		Addressed and spiraled throughout the year	
Family Overview (link below)		Integration of Technology:	
Grade 4 Family Overview		<i>Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning</i>	
Unit-specific Vocabulary:		Aligned Unit Materials, Resources, and Technology (beyond core resources):	
Digital citizen Cyberbullying Upstander Personal information Private Information Register (online) Responsibility Digital Footprint		<i>Digital Productivity Tools</i>	
Opportunities for Interdisciplinary Connections:		Anticipated misconceptions:	
Connect to SEL Advisory Lessons Connect to to ELA Units		<p>School Google accounts and search history are not visible to teachers and are okay for personal use</p> <p>People can not see something I post on the internet if I delete it</p> <p>It is OK to share personal information because I can trust people online</p>	
Connections to Prior Units:		Connections to Future Units:	
Continuation of module 1 in Grade 3		Continuation of module 1 in Grade 5	

Differentiation through <i>Universal Design for Learning</i>			
UDL Indicator		Teacher Actions:	
3.1 COMPREHENSION > Comprehension: Activate or supply background knowledge		Anchor instruction by linking to and activating relevant prior knowledge (e.g., using visual imagery, concept anchoring, or concept mastery routines)	
9.2 ENGAGEMENT > Self Regulation: Facilitate personal coping skills and strategies		Provide differentiated models, scaffolds and feedback for: <ul style="list-style-type: none"> - Managing frustration - Seeking external emotional support - Developing internal controls and coping skills - Use real life situations or simulations to demonstrate coping skills 	
Supporting Multilingual/English Learners			
Related <i>CELP standards:</i>		Learning Targets:	
4-5.2: participate in grade appropriate oral and written exchanges of information, ideas, and analyses, responding to peer, audience, or reader comments and questions.		With prompting and supports: <ul style="list-style-type: none"> • I can actively listen to others • I can participate in short conversations and short written exchanges using academic and domain specific vocabulary • I can respond to simple questions and wh-questions • I can present information and ideas 	
Common Learning Experience	Learning Target	Success Criteria/ Assessment	Resources
4.DigCit.1 Media Balance	I can define the term "digital footprint" and identify the online activities that contribute to it.	Identify ways they are -- and are not -- in control of their digital footprint. Understand what responsibilities they have for the digital footprints of themselves and others.	Digital Productivity Tools
4.DigCit.2 Being an Informed Critical Consumer of Media	I can Identify the reasons why people share information about themselves online.	Explain the difference between private and personal information. Explain why it is risky to share private information online.	Digital Productivity Tools

4.DigCit.3 Safe Spaces Online	I can reflect on the characteristics that make someone an upstanding digital citizen.	Recognize characteristics of cyberbullying..	Digital Productivity Tools
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Module Title:

Module 2: Information and Media Literacy

Relevant Standards: Bold indicates priority

AASL	CCS	ISTE
I.A.1-2 Think Learners display curiosity and initiative by: 1. Formulating questions about a personal interest or a curricular topic. 2. Recalling prior and background knowledge as context for new meaning.	W.7 W.8	1A 3 A-B
I.B.1 Create Learners engage with new knowledge by following a process that includes: 1. Using evidence to investigate questions.	W.8	4A
IV.A.1-3 Think Learners act on an information need by: 1. Determining the need to gather information. 2. Identifying possible sources of information. 3. Making critical choices about information sources to use.	W.7	3C
IV.B.1-4 Create Learners gather information appropriate to the task by: 1. Seeking a variety of sources. 2. Collecting information representing diverse perspectives. 3. Systematically questioning and assessing the validity and accuracy of information. 4. Organizing information by priority, topic, or other systematic scheme.	W.7 W.8	6C-D
V.A.3 Think Learners develop and satisfy personal curiosity by: 3. Engaging in inquiry-based processes for personal growth.	W.7	6C
VI.A.1-3 Think Learners follow ethical and legal guidelines for gathering and using information by: 1. Responsibly applying information, technology, and media to learning. 2. Understanding the ethical use of information, technology, and media. 3. Evaluating information for accuracy, validity, social and cultural context, and appropriateness for need.	W.8 SL.2	2C
VI.B.1-2 Create Learners use valid information and reasoned conclusions to make ethical decisions in the creation of knowledge by: 1. Ethically using and reproducing others' work. 2. Acknowledging authorship and demonstrating respect for the intellectual property of others.	RI.2 W.8	2C

Essential Question(s):

1. How do I conduct a short research project to build knowledge about different aspects of a topic?
2. How can I sort my notes into categories?

Enduring Understanding(s):

Apply a fundamental understanding of the ethical/legal issues surrounding the access and use of media

Access information efficiently (time) and effectively

3. How do I paraphrase information from texts read, heard or presented? 4. How can I provide a list of sources I used?	(sources) Evaluate information critically and competently
Demonstration of Learning:	Pacing for Unit
Research Process Performance Task	Addressed and spiraled throughout the year
Family Overview (link below)	Integration of Technology:
Grade 4 Family Overview	<i>Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning</i>
Unit-specific Vocabulary:	Aligned Unit Materials, Resources, and Technology (beyond core resources):
Question Source Accurate Relevant Ethical Legal Plagiarism Cite/Citation	Digital Productivity Tools Online Databases
Opportunities for Interdisciplinary Connections:	Anticipated misconceptions:
Connect to ELA research unit. Connect to science and social studies topics.	Copying and pasting a URL is the proper way to give credit. It's okay to take notes by copying word for word.
Connections to Prior Units:	Connections to Future Units:
Continuation of module in Grade 3	Continuation of module in Grade 5
Differentiation through <i>Universal Design for Learning</i>	
UDL Indicator	Teacher Actions:
3.3 REPRESENTATION > Comprehension: Guide information processing and visualization	<ul style="list-style-type: none"> - Give explicit prompts for each step in a sequential process - Provide interactive models that guide exploration and new understandings - Introduce graduated scaffolds that support information processing strategies - Progressively release information (e.g., sequential highlighting) - Remove unnecessary distractions unless they are essential to the instructional goal
6.3 ACTION & EXPRESSION > Executive Functioning: Facilitate managing information and resources	<ul style="list-style-type: none"> - Provide graphic organizers and templates for data collection and organizing information - Embed prompts for categorizing and systematizing - Provide checklists and guides for note-taking

Supporting Multilingual/English Learners			
Related <i>CELP standards</i> :		Learning Targets:	
4-5.5: conduct research and evaluate and communicate findings to answer questions or solve problems.		With prompting and supports: <ul style="list-style-type: none"> • I can conduct a research project to answer a question. • I can gather information from provided sources • I can record some information/observations in simple notes 	
Common Learning Experience	Learning Target	Success Criteria/ Assessment	Resources
4.Inquiry.1 Formulate questions - Define Information Needs	I can ask a question about what is interesting or about what I am learning in school. I can think of things I already know to help me with new information	Formulate questions on a topic of personal or curricular interest and recall knowledge as a foundation for new learning.	Online Databases
4.Inquiry.2 Web Evaluation including relevant and fake vs. real websites	I can locate information from a variety of sources to answer my questions.	Locate relevant information while using website evaluation principles.	Digital Productivity Tools Online Databases
4.Inquiry.3 Paraphrase a text	I can paraphrase information from a source.	Understand ethical and legal guidelines for technology use and apply this understanding by paraphrasing text.	Digital Productivity Tools Online Databases
4.Inquiry.4 Use online database tools to cite a source	I can give credit to my sources by locating a citation.	Understand ethical and legal guidelines for technology use and apply this understanding by citing sources.	Digital Productivity Tools Online Databases

Module Title:

Module 3: Growth and Curiosity

Relevant Standards: Bold indicates priority

AASL	CCS	ISTE
I.A.1-2 Think Learners display curiosity and initiative by: 1. Formulating questions about a personal interest or a curricular topic. 2. Recalling prior and background knowledge as context for new meaning.	W.7 W.8	1A 3A-B
I.D.1-4 Grow Learners participate in an ongoing inquiry-based process by: 1. Continually seeking knowledge. 2. Engaging in sustained inquiry. 3. Enacting new understanding through real-world connections. 4. Using reflection to guide informed decisions.	W.7	3D
II.A.3 Think Learners contribute a balanced perspective when participating in a learning community by: 3. Describing their understanding of cultural relevancy and placement within the global learning community.	RI.6	N/A
II.B.3 Create [K-3 in Nutmeg Common Experience] Learners adjust their awareness of the global learning community by: 3. Representing diverse perspectives during learning activities.	W.6	7D
II.D.2 Grow Learners demonstrate empathy and equity in knowledge building within the global learning community by: 2. Demonstrating interest in other perspectives during learning activities.	SL.1	1B
V.A.1 Think Learners develop and satisfy personal curiosity by: 1. Reading widely and deeply in multiple formats and write and create for a variety of purposes.	RI.10 RL.10	3D
V.B.2 Create Learners construct new knowledge by: 2. Persisting through self-directed pursuits by tinkering and making.	SL.1	5C
V.C.1 Share Learners engage with the learning community by: 1. Expressing curiosity about a topic of personal interest or curricular relevance.	W.7	7B
V.C.3 Share Learners engage with the learning community by: 3. Collaboratively identifying innovative solutions to a challenge or problem.	SL.1	7C

V.D.1 Grow Learners develop through experience and reflection by: 1. Iteratively responding to challenges.		SL.1	1C
Essential Question(s):		Enduring Understanding(s):	
<ol style="list-style-type: none"> How do I create new learning based on the information I am curious about? How can I grow as a reader by reading widely and deeply in multiple formats? How can I construct new knowledge by persisting through self-directed pursuits by tinkering and making? 		<p>Use digital technology, communication tools, and/or networks to access, manage, integrate, evaluate, and create information in order to function in a knowledge society</p> <p>Use information accurately and creatively for the issue or problem at hand</p>	
Demonstration of Learning:		Pacing for Unit	
Problem Solving Performance Task		Addressed and spiraled throughout the year	
Family Overview (link below)		Integration of Technology:	
Grade 4 Family Overview		<i>Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning</i>	
Unit-specific Vocabulary:		Aligned Unit Materials, Resources, and Technology (beyond core resources):	
Curiosity Background knowledge Inquire Inquiry Real-world Connection Reflection Relevant Genre Block (coding) Sequences Loops Debug Events Conditionals Test and debug Alignment Rotate Gradient		Online Databases Print Materials Maker Materials Media in Multiple Formats	
Opportunities for Interdisciplinary Connections:		Anticipated misconceptions:	
Connect to ELA (literacy) Connect to science and social studies topics Connect to science/math (coding/tinkering) Connect to math and art (digital drawing)		<p>There is a limited amount of information on a single topic.</p> <p>This is too hard for me/I can't do this</p>	
Connections to Prior Units:		Connections to Future Units:	

Continuation of module in Grade 3		Continuation of module in Grade 5	
Differentiation through Universal Design for Learning			
UDL Indicator		Teacher Actions:	
7.2 ENGAGEMENT > Recruiting Interest: Optimize relevance, value, and authenticity		<p>Vary activities and sources of information so that they can be:</p> <ul style="list-style-type: none"> - Personalized and contextualized to learners' lives - Culturally relevant and responsive - Socially relevant - Age and ability appropriate - Appropriate for different racial, cultural, ethnic, and gender groups - Include activities that foster the use of imagination to solve novel and relevant problems, or make sense of complex ideas in creative ways 	
8.2 ENGAGEMENT > Sustaining Effort & Persistence: Vary demands and resources to optimize challenge		<ul style="list-style-type: none"> - Differentiate the degree of difficulty or complexity within which core activities can be completed - Vary the degrees of freedom for acceptable performance - Emphasize process, effort, improvement in meeting standards as alternatives to external evaluation and competition 	
Supporting Multilingual/English Learners			
Related CELP standards:		Learning Targets:	
4-5.8: determine the meaning of words and phrases in oral presentations and literary and informational text.		<p>In simple oral discourse, readalouds, and written texts about familiar topics, experiences, or events:</p> <ul style="list-style-type: none"> • I can use context, some visual aids, and reference materials to determine the meaning of words and phrases 	
Common Learning Experience	Learning Target	Success Criteria/ Assessment	Resources
<p>4.Grow.1 Use an online catalog to find materials on any topic of interest</p> <p>Use school databases to locate information on topics of interest or curricular topics</p>	<p>I can search for information about a topic I am interested in or learning about in school.</p> <p>I can think of things I already know to help me with new information.</p> <p>I can use an organizational system to locate materials.</p>	Use search skills to drive deeper inquiry into a topic of interest or a curricular topic.	<p>Online Databases</p> <p>Print Materials</p> <p>Media in Multiple Formats</p>
4.Grow.2 Opportunities to	I can spend time learning about topics I am	Use strategies to engage in ongoing inquiry.	<p>Online Databases</p> <p>Print Materials</p>

<p>self-select and read a variety of books, texts</p> <p>(e.g. Book tasting, Search a topic of interest Make connections between learning and self/world, Award books)</p>	<p>interested in.</p> <p>I can read books with different genres and topics and respond to questions about my reading.</p> <p>I can learn new information by connecting to knowledge I already have.</p> <p>I can adjust my awareness of diverse perspectives during learning activities.</p> <p>I can demonstrate empathy and equity in other perspectives during learning activities.</p>	<p>Read a variety of books with different perspectives and respond to questions verbally and in writing.</p>	<p>Media in Multiple Formats</p>
<p>4.Grow.3 Coding</p> <p>Tinkering and Making</p> <p>Digital Drawing</p>	<p>I can persevere through tinkering and making challenges.</p> <p>I can use logical thinking to solve a problem.</p>	<p>Complete a variety of challenges involving coding, tinkering, making and digital drawing.</p>	<p>Maker Materials Media in Multiple Formats</p>

Module Title:

Module 4: Presentation of Information (Show)

Relevant Standards: Bold indicates priority

AASL	CCS	ISTE
I.B.3 Create Learners engage with new knowledge by following a process that includes: 3. Generating products that illustrate learning.	W.6	4A
II.B.3 Create [K-3 in Nutmeg Common Experience] Learners adjust their awareness of the global learning community by: 3. Representing diverse perspectives during learning activities.	W.6	7D
III.B.1 Create Learners participate in personal, social, and intellectual networks by: 1. Using a variety of communication tools and resources.	W.6	1C
III.D.1 Grow Learners actively participate with others in learning situations by: 1. Actively contributing to group discussions.	SL.1	7C
V.A.1 Think Learners develop and satisfy personal curiosity by: 1. Reading widely and deeply in multiple formats and write and create for a variety of purposes.	RI.10 RL.10	3D
VI.C.2 Share Learners responsibly, ethically, and legally share new information with a global community by: 2. Disseminating new knowledge through means appropriate for the intended audience.	W.8 SL.2	2C

Essential Question(s):

1. How do I interact with others to discuss fourth grade topics?
2. How do I use productivity tools to create a product?
3. How do I give credit to other people's work in my presentation?

Enduring Understanding(s):

Use digital technology, communication tools, and/or networks to access, manage, integrate, evaluate, and create information in order to function in a knowledge society

Understand both how and why media messages are constructed, and for what purpose

Use information accurately and creatively for the issue or problem at hand

Manage the flow of information from a wide variety of sources

Apply a fundamental understanding of the ethical/ legal issues surrounding the access and use of information

Demonstration of Learning:	Pacing for Unit
Digital Artifact Creation	Addressed and spiraled throughout the year
Family Overview (link below)	Integration of Technology:
Grade 4 Family Overview	<i>Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning</i>
Unit-specific Vocabulary:	Aligned Unit Materials, Resources, and Technology (beyond core resources):
Symmetry Balance Generate Product Communication Ethical Audience Feedback	<i>Digital Productivity Tools</i>
Opportunities for Interdisciplinary Connections:	Anticipated misconceptions:
Connect to ELA units. Connect to science and social studies topics.	The teacher is the only audience of finished work. Sharing work isn't part of the research process.
Connections to Prior Units:	Connections to Future Units:
Continuation of module in Grade 3	Continuation of module in Grade 5
Differentiation through <i>Universal Design for Learning</i>	
UDL Indicator	Teacher Actions:
5.1 ACTION 7 EXPRESSION > Expression & Communication: Use multiple media for communication	<ul style="list-style-type: none"> - Compose in multiple media such as text, speech, drawing, illustration, comics, storyboards, design, film, music, dance/movement, visual art, sculpture, or video - Use physical manipulatives (e.g., blocks, 3D models) - Use interactive web tools (e.g., storyboards, comic strips, animation presentations) - Solve problems using a variety of strategies
7.1 ENGAGEMENT > Recruiting Interest: Optimize individual choice and autonomy	<p>Provide learners with as much discretion and autonomy as possible by providing choices in such things as:</p> <ul style="list-style-type: none"> - The level of perceived challenge - The context or content used for practicing and assessing skills - The tools used for information gathering or production - The color, design, or graphics of layouts, etc. - The sequence or timing for completion of subcomponents of tasks
Supporting Multilingual/English Learners	
Related <i>CELP standards:</i>	Learning Targets:

4-5.3: speak and write about grade-appropriate complex literary and informational texts and topics.		With prompting and supports: <ul style="list-style-type: none"> • I can deliver short oral presentations... • I can write texts with drawings or illustrations... • I can use academic and domain specific words... about familiar texts, topics, and experiences.	
Common Learning Experience	Learning Target	Success Criteria/ Assessment	Resources
4.Show.1 Visual Literacy and Design Principles	I can demonstrate my understanding of design principles by creating an engaging product.	Use visual literacy principles to create digital, information products.	Digital Productivity Tools
4.Show.2 Use digital productivity tools to showcase information and learning.	I can create a product that shows what I have learned.	Generate products that illustrate learning.	Digital Productivity Tools
4.Show.3 Share product with partners and/or small groups	I can use different technology tools to share my work with others.	Use a variety of tools to share learning and participate in networking.	Digital Productivity Tools
4.Show.4 Groups discuss their learning or products and share feedback	I can add to group discussions and listen to others.	Contribute to group discussions.	N/A
4.Show.5 Include a reference to where information was found during creation of a product.	I can responsibly share new information in the way that works best for my audience.	Ethically and legally share new information through best means for the intended audience.	Digital Productivity Tools

Course Title:	Content Area:	Grade Level:	Credit (if applicable)
Library Media Science	Library Media	Grade 5	N/A
Course Description:			
<p>The school library media programs of Bristol Public Schools facilitate opportunities for students and faculty to become lifelong learners who thrive in complex learning environments. Through instructional strategies designed to infuse inquiry and technology as tools for learning, students will develop skills to interpret and develop new understandings, seek diverse perspectives, create new knowledge, and grow as ethical, digital citizens. Through equitable access to reading and information resources, the library media programs promote lifelong reading in a safe environment conducive to learning.</p>			
Aligned Core Resources:		Connection to the <i>BPS Vision of the Graduate</i>	
N/A		<p>Media Literacy</p> <ul style="list-style-type: none"> • Understand both how and why media messages are constructed, and for what purpose • Examine how individuals interpret messages differently, how values and points of view are included or excluded, and how media can influence beliefs and behaviors • Apply a fundamental understanding of the ethical/legal issues surrounding the access and use of media <p>Communications</p> <ul style="list-style-type: none"> • Communicate effectively in diverse environments (including becoming multilingual) <p>Communications and Technology Literacy</p> <ul style="list-style-type: none"> • Use digital technology, communication tools, and/or networks to access, manage, integrate, evaluate, and create information in order to function in a knowledge society <p>Information Literacy</p> <ul style="list-style-type: none"> • Access information on efficiently (time) and effectively (sources) • Evaluate information critically and competently • Use information accurately and creatively for the issue or problem at hand • Manage the flow of information from a wide variety of sources • Apply a fundamental understanding of the ethical/ legal issues surrounding the access and use of information 	
Additional Course Information: <i>Knowledge/Skill Dependent courses/prerequisites</i>		Link to <i>Completed Equity Audit</i>	
N/A		LMS Curriculum Audit	
Standard Matrix			

AASL	CCS	ISTE	Module 1	Module 2	Module 3	Module 4
I. Inquire (AASL)						
Build new knowledge by inquiring, thinking critically, identifying problems, and developing strategies for solving problems.						
I.A.1-2 Think Learners display curiosity and initiative by: 1. Formulating questions about a personal interest or a curricular topic. 2. Recalling prior and background knowledge as context for new meaning.	W.7 W.8	1A, (K-5) 3A-B (4-5)		X	X	
I.B.1 Create (1-5) Learners engage with new knowledge by following a process that includes: 1. Using evidence to investigate questions.	W.8	4A		X		
I.B.3 Create (2-5) Learners engage with new knowledge by following a process that includes: 3. Generating products that illustrate learning.	W.6 (2-5)	4A				X
I.D.1 (K-1) I.D.1-4 Grow (2-5) Learners participate in an ongoing inquiry-based process by: 1. Continually seeking knowledge. 2. Engaging in sustained inquiry. 3. Enacting new understanding through real-world connections. 4. Using reflection to guide informed decisions.	W.7	3D			X	
II. Include (AASL)						
Demonstrate an understanding of and commitment to inclusiveness and respect for diversity in the learning community.						
II.A.3 Think Learners contribute a balanced perspective when participating in a learning community by: 3. Describing their understanding of cultural relevancy and placement within the global learning community.	RI.6	N/A			X	
II.B.3 Create [K-3 in Nutmeg Common Experience] Learners adjust their awareness of the global learning community by: 3. Representing diverse perspectives during learning activities.	SL.1 in K-2, W.6 in 3-5	7D			X	X
II.D.2 Grow	SL.1	1B	X		X	

Learners demonstrate empathy and equity in knowledge building within the global learning community by: 2. Demonstrating interest in other perspectives during learning activities.						
II.D.3 Grow Learners demonstrate empathy and equity in knowledge building within the global learning community by: 3. Reflecting on their own place within the global learning community.	SL.1	1B	X			
III. Collaborate (AASL) Work effectively with others to broaden perspectives and work toward common goals						
III.B.1 Create Learners participate in personal, social, and intellectual networks by: 1. Using a variety of communication tools and resources.	W.6 (2-5)	1C				X
III.D.1 Grow Learners actively participate with others in learning situations by: 1. Actively contributing to group discussions.	SL.1	7C				X
III.D.2 Grow Learners actively participate with others in learning situations by: 2. Recognizing learning as a social responsibility.	SL.1	1B	X			
IV. CURATE (AASL) Make meaning for oneself and others by collecting, organizing, and sharing resources of personal relevance.						
IV.A.1-2 Think (K-3) IV.A.1-3 (GRADES 4-5) Learners act on an information need by: 1. Determining the need to gather information. 2. Identifying possible sources of information. 3. Making critical choices about information sources to use.	W.7	3C		X		
IV.B.1-2 Create (K-3) IV.B.1-4 Create (GRADES 4-5) Learners gather information appropriate to the task by: 1. Seeking a variety of sources. 2. Collecting information representing diverse perspectives. 3. Systematically questioning and assessing the validity and accuracy of information. 4. Organizing information by priority, topic, or other systematic scheme.	W.7 W.8	6C-D		X		

V. EXPLORE (AASL)						
Discover and innovate in a growth mindset developed through experience and reflection.						
V.A.1 Think Learners develop and satisfy personal curiosity by: 1. Reading widely and deeply in multiple formats and write and create for a variety of purposes.	RI.10 RL.10	3D			X	X
V.A.3 Think (3-5) Learners develop and satisfy personal curiosity by: 3. Engaging in inquiry-based processes for personal growth.	W.7	6C		X		
V.B.2 Create [Maker/Tinker, Coding, Indi, LittleBits, Bolts] Learners construct new knowledge by: 2. Persisting through self-directed pursuits by tinkering and making.	SL.1	5C			X	
V.C.1 Share Learners engage with the learning community by: 1. Expressing curiosity about a topic of personal interest or curricular relevance.	W.7	7B			X	
V.C.3 Share [Collaborating w/Indi, LittleBits, Bolts] Learners engage with the learning community by: 3. Collaboratively identifying innovative solutions to a challenge or problem.	SL.1	7C			X	
V.D.1 Grow [iteration] Learners develop through experience and reflection by: 1. Iteratively responding to challenges.	SL.1	1C			X	
VI. ENGAGE (AASL)						
Demonstrate safe, legal, and ethical creating and sharing of knowledge products independently while engaging in a community of practice and an interconnected world.						
VI.A.1 Think (K-2) VI.A.1-2 Think (3) VI.A.1-3 Think (4-5) Learners follow ethical and legal guidelines for gathering and using information by: 1. Responsibly applying information, technology, and media to learning. 2. Understanding the ethical use of information, technology, and media. 3. Evaluating information for accuracy, validity, social and cultural context, and appropriateness for need.	RI.5 (K-3) W.8 SL.2 (3-5)	2C		X		
VI.B.1-2 Create Learners use valid information and reasoned conclusions to	RI.2 W.8	2C		X		

<p>make ethical decisions in the creation of knowledge by:</p> <ol style="list-style-type: none"> 1. Ethically using and reproducing others' work. 2. Acknowledging authorship and demonstrating respect for the intellectual property of others. 						
<p>VI.C.2 Share Learners responsibly, ethically, and legally share new information with a global community by:</p> <ol style="list-style-type: none"> 2. Disseminating new knowledge through means appropriate for the intended audience. 	W.8 SL.2 (3-5)	2C				X
<p>VI.D.1, 3 Learners engage with information to extend personal learning by:</p> <ol style="list-style-type: none"> 1. Personalizing their use of information and information technologies. 	SL.1	2AB,D	X			

Unit Links

If unit headings are formatted as a heading, then we can link a Table of Contents to better organize and provide faster access to each unit

[Module 1: Digital Citizenship](#)

[Module 2: Information and Media Literacy](#)

[Module 3: Growth and Curiosity](#)

[Module 4: Presentation of Information \(Show\)](#)

Module Title:

Module 1: Digital Citizenship

Relevant Standards: Bold indicates priority

AASL	CCS	ISTE
<p>II.D.2-3 Grow Learners demonstrate empathy and equity in knowledge building within the global learning community by:</p> <ol style="list-style-type: none"> 2. Demonstrating interest in other perspectives during learning activities. 3. Reflecting on their own place within the global learning community. 	SL.1	1B

III.D.2 Grow Learners actively participate with others in learning situations by: 2. Recognizing learning as a social responsibility.	SL.1	1B
VI.D.1, 3 Learners engage with information to extend personal learning by: 1. Personalizing their use of information and information technologies.	SL.1	2AB,D

Essential Question(s):	Enduring Understanding(s):
<ol style="list-style-type: none"> How can I be an informed consumer of information? How do stereotypes and bias in media shape our experiences online? How do you keep online friendships safe? 	<p>Examine how individuals interpret messages differently, how values and points of view are included or excluded, and how media can influence beliefs and behaviors</p> <p>Evaluate information critically and competently</p> <p>Understand both how and why media messages are constructed, and for what purpose</p> <p>Communicate effectively in diverse environments (including becoming multilingual)</p>
Demonstration of Learning:	Pacing for Unit
Scenario based performance task	Addressed and spiraled throughout the year
Family Overview (link below)	Integration of Technology:
Grade 5 Family Overview	<i>Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning</i>
Unit-specific Vocabulary:	Aligned Unit Materials, Resources, and Technology (beyond core resources):
Media Advertising Clickbait Curiosity Gap URL Navigation Bar Website Web Page Bias Stereotype Private Information Risk	Digital Productivity Tools
Opportunities for Interdisciplinary Connections:	Anticipated misconceptions:
Connect to SEL Advisory Lessons Connect to to ELA Units	I can trust all people online I can spend as much time as I want on my device Everything you read online is true

Connections to Prior Units:		Connections to Future Units:	
Continuation of module 1 in Grade 4		Continuation of module 1 in Grade 6	
Differentiation through Universal Design for Learning			
UDL Indicator		Teacher Actions:	
3.1 COMPREHENSION > Comprehension: Activate or supply background knowledge		Anchor instruction by linking to and activating relevant prior knowledge (e.g., using visual imagery, concept anchoring, or concept mastery routines)	
9.2 ENGAGEMENT > Self Regulation: Facilitate personal coping skills and strategies		Provide differentiated models, scaffolds and feedback for: - Managing frustration - Seeking external emotional support - Developing internal controls and coping skills - Use real life situations or simulations to demonstrate coping skills	
Supporting Multilingual/English Learners			
Related CELP standards:		Learning Targets:	
4-5.2: participate in grade appropriate oral and written exchanges of information, ideas, and analyses, responding to peer, audience, or reader comments and questions.		With prompting and supports: <ul style="list-style-type: none"> • I can actively listen to others • I can participate in short conversations and short written exchanges using academic and domain specific vocabulary • I can respond to simple questions and wh-questions • I can present information and ideas 	
Common Learning Experience	Learning Target	Success Criteria/ Assessment	Resources
5.DigCit.1 Being an Informed Critical Consumer of Media	I can explain how clickbait uses the curiosity gap to get your attention. I can identify the purpose of parts of a website to help evaluate the source.	Use strategies to identify and avoid clickbait. Recognize characteristics of websites and web pages.	Digital Productivity Tools
5.DigCit.2 Inclusive Engagement	I can identify how stereotypes and bias are present online.	Describe how stereotypes can lead to unfairness or bias.	Digital Productivity Tools
5.DigCit.3 Safe Spaces Online	I can identify different kinds of online only friendships. I can identify strategies for dealing with cyberbullying.	Describe the benefits and risks of online-only friendships. Identify reasons why cyberbullying happens, ways to respond to	Digital Productivity Tools

		bullying, and ways to be an upstander.	
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Module Title:		
Module 2: Information and Media Literacy		
Relevant Standards: Bold indicates priority		
AASL	CCS	ISTE
I.A.1-2 Think Learners display curiosity and initiative by: 1. Formulating questions about a personal interest or a curricular topic. 2. Recalling prior and background knowledge as context for new meaning.	W.7 W.8	1A, 3 A-B
I.B.1 Create Learners engage with new knowledge by following a process that includes: 1. Using evidence to investigate questions.	W.8	4A
IV.A.1-3 Think Learners act on an information need by: 1. Determining the need to gather information. 2. Identifying possible sources of information. 3. Making critical choices about information sources to use.	W.7	3C
IV.B.1-4 Create Learners gather information appropriate to the task by: 1. Seeking a variety of sources. 2. Collecting information representing diverse perspectives. 3. Systematically questioning and assessing the validity and accuracy of information. 4. Organizing information by priority, topic, or other systematic scheme.	W.7 W.8	6C-D
V.A.3 Think Learners develop and satisfy personal curiosity by: 3. Engaging in inquiry-based processes for personal growth.	W.7	6C
VI.A.1-3 Think Learners follow ethical and legal guidelines for gathering and using information by: 1. Responsibly applying information, technology, and media to learning. 2. Understanding the ethical use of information, technology, and media. 3. Evaluating information for accuracy, validity, social and cultural context, and appropriateness for need.	W.8 SL.2	2C
VI.B.1-2 Create Learners use valid information and reasoned conclusions to make ethical decisions in the creation of knowledge by: 1. Ethically using and reproducing others' work. 2. Acknowledging authorship and demonstrating respect for the intellectual property of others.	RI.2 W.8	2C
Essential Question(s):	Enduring Understanding(s):	
<ol style="list-style-type: none"> How can I conduct research to answer a question? How can I gather relevant information from print and digital sources? 	<p>Apply a fundamental understanding of the ethical/legal issues surrounding the access and use of media</p> <p>Access information efficiently (time) and effectively</p>	

<p>3. How do I use a list of sources to avoid plagiarism?</p> <p>4. How do I draw evidence from informational texts to support analysis, reflection and research?</p>	<p>(sources)</p> <p>Evaluate information critically and competently</p>
Demonstration of Learning:	Pacing for Unit
Research Process Performance Task	Addressed and spiraled throughout the year
Family Overview (link below)	Integration of Technology:
Grade 5 Family Overview	<i>Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning</i>
Unit-specific Vocabulary:	Aligned Unit Materials, Resources, and Technology (beyond core resources):
<p>Background Knowledge</p> <p>Curiosity</p> <p>Initiative</p> <p>Prior Knowledge</p> <p>Questions</p> <p>Recall</p> <p>Evidence</p> <p>Investigate</p> <p>Critical</p> <p>Determine</p> <p>Identify</p> <p>Sources</p> <p>Collect</p> <p>Accurate</p> <p>Relevant</p> <p>Ethical</p> <p>Legal</p>	<p>Digital Productivity Tools</p> <p>Online Databases</p>
Opportunities for Interdisciplinary Connections:	Anticipated misconceptions:
<p>Connect to ELA research unit.</p> <p>Connect to science and social studies topics.</p>	<p>Copying and pasting a URL is the proper way to give credit to sources.</p> <p>It's okay to take notes by copying word for word.</p> <p>Everything on the Internet is true. I can research using one source.</p>
Connections to Prior Units:	Connections to Future Units:
Continuation of module in Grade 4	Continuation of module in Grade 6
Differentiation through Universal Design for Learning	
UDL Indicator	Teacher Actions:
3.3 REPRESENTATION > Comprehension: Guide information processing and visualization	- Give explicit prompts for each step in a sequential process

		<ul style="list-style-type: none"> - Provide interactive models that guide exploration and new understandings - Introduce graduated scaffolds that support information processing strategies - Progressively release information (e.g., sequential highlighting) - Remove unnecessary distractions unless they are essential to the instructional goal 	
6.3 ACTION & EXPRESSION > Executive Functioning: Facilitate managing information and resources		<ul style="list-style-type: none"> - Provide graphic organizers and templates for data collection and organizing information - Embed prompts for categorizing and systematizing - Provide checklists and guides for note-taking 	
Supporting Multilingual/English Learners			
Related <u>CELP standards:</u>		Learning Targets:	
4-5.5: conduct research and evaluate and communicate findings to answer questions or solve problems.		With prompting and supports: <ul style="list-style-type: none"> • I can conduct a research project to answer a question. • I can gather information from provided sources • I can record some information/observations in simple notes 	
Common Learning Experience	Learning Target	Success Criteria/ Assessment	Resources
5.Inquiry.1 Formulate questions - Define Information Needs	<p>I can ask a question about what is interesting or about what I am learning in school.</p> <p>I can think of things I already know to help me with new information.</p>	Display curiosity by formulating questions and recalling prior knowledge about topics.	Online Databases
5.Inquiry.2 Learn Search Strategies and Analyze Search Results	I can analyze sources for accuracy and relevancy.	Use search skills to seek, collect, question, and assess information.	Digital Productivity Tools Online Databases
5.Inquiry.3 Practice locating information in databases to answer questions (Use database features)	I can locate information from a variety of sources to answer my questions.	Use search skills to seek, collect, question, and assess information.	Digital Productivity Tools Online Databases
5.Inquiry.4 Practice Note Taking, Paraphrasing and Summarizing information to answer questions	I can paraphrase and summarize information from a source.	Understand ethical and legal guidelines for technology use and apply this understanding by paraphrasing and summarizing text.	Digital Productivity Tools

5.Inquiry.5 Use online database tools to cite a source	I can give credit to my sources by locating a citation.	Understand ethical and legal guidelines for technology use and apply this understanding by citing the source.	Digital Productivity Tools Online Databases
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Module Title:

Module 3: Growth and Curiosity

Relevant Standards: Bold indicates priority

AASL	CCS	ISTE
I.A.1-2 Think Learners display curiosity and initiative by: 1. Formulating questions about a personal interest or a curricular topic. 2. Recalling prior and background knowledge as context for new meaning.	W.7 W.8	1A 3A-B
I.D.1-4 Grow Learners participate in an ongoing inquiry-based process by: 1. Continually seeking knowledge. 2. Engaging in sustained inquiry. 3. Enacting new understanding through real-world connections. 4. Using reflection to guide informed decisions.	W.7	3D
II.A.3 Think Learners contribute a balanced perspective when participating in a learning community by: 3. Describing their understanding of cultural relevancy and placement within the global learning community.	RI.6	N/A
II.B.3 Create [K-3 in Nutmeg Common Experience] Learners adjust their awareness of the global learning community by: 3. Representing diverse perspectives during learning activities.	W.6	7D
II.D.2 Grow Learners demonstrate empathy and equity in knowledge building within the global learning community by: 2. Demonstrating interest in other perspectives during learning activities.	SL.1	1B
V.A.1 Think Learners develop and satisfy personal curiosity by: 1. Reading widely and deeply in multiple formats and write and create for a variety of purposes.	RI.10 RL.10	3D
V.B.2 Create Learners construct new knowledge by: 2. Persisting through self-directed pursuits by tinkering and making.	SL.1	5C
V.C.1 Share Learners engage with the learning community by: 1. Expressing curiosity about a topic of personal interest or curricular relevance.	W.7	7B
V.C.3 Share Learners engage with the learning community by: 3. Collaboratively identifying innovative solutions to a challenge or problem.	SL.1	7C

V.D.1 Grow Learners develop through experience and reflection by: 1. Iteratively responding to challenges.		SL.1	1C
Essential Question(s):		Enduring Understanding(s):	
<ol style="list-style-type: none"> 1. How do I use curiosity from past experiences to discover and create new learning? 2. How do I develop and communicate my own perspective? 3. How can I grow as a reader by reading widely and deeply in multiple formats? 4. How can I construct new knowledge by persisting through self-directed pursuits by tinkering and making? 		<p>Use digital technology, communication tools, and/or networks to access, manage, integrate, evaluate, and create information in order to function in a knowledge society</p> <p>Use information accurately and creatively for the issue or problem at hand</p>	
Demonstration of Learning:		Pacing for Unit	
Problem Solving Performance Task		Addressed and spiraled throughout the year	
Family Overview (link below)		Integration of Technology:	
Grade 5 Family Overview		<i>Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning</i>	
Unit-specific Vocabulary:		Aligned Unit Materials, Resources, and Technology (beyond core resources):	
Curiosity Background knowledge Inquire Inquiry Real-world Connection Reflection Relevant Genre Block (coding) Sequences Loops Debug Events Conditionals Test and debug Alignment Rotate Gradient		Online Databases Print Materials Maker Materials Media in Multiple Formats	
Opportunities for Interdisciplinary Connections:		Anticipated misconceptions:	
Connect to ELA (literacy) Connect to science and social studies topics Connect to science/math (coding/tinkering) Connect to math and art (digital drawing)		The library does not have any materials to meet my own personal curiosity. This is too hard for me/I can't do this	

Connections to Prior Units:		Connections to Future Units:	
Continuation of module in Grade 4		Continuation of module in Grade 6	
Differentiation through Universal Design for Learning			
UDL Indicator		Teacher Actions:	
7.2 ENGAGEMENT > Recruiting Interest: Optimize relevance, value, and authenticity		<p>Vary activities and sources of information so that they can be:</p> <ul style="list-style-type: none"> - Personalized and contextualized to learners' lives - Culturally relevant and responsive - Socially relevant - Age and ability appropriate - Appropriate for different racial, cultural, ethnic, and gender groups - Include activities that foster the use of imagination to solve novel and relevant problems, or make sense of complex ideas in creative ways 	
8.2 ENGAGEMENT > Sustaining Effort & Persistence: Vary demands and resources to optimize challenge		<ul style="list-style-type: none"> - Differentiate the degree of difficulty or complexity within which core activities can be completed - Vary the degrees of freedom for acceptable performance - Emphasize process, effort, improvement in meeting standards as alternatives to external evaluation and competition 	
Supporting Multilingual/English Learners			
Related CELP standards:		Learning Targets:	
4-5.8: determine the meaning of words and phrases in oral presentations and literary and informational text.		<p>In simple oral discourse, readalouds, and written texts about familiar topics, experiences, or events:</p> <ul style="list-style-type: none"> • I can use context, some visual aids, and reference materials to determine the meaning of words and phrases 	
Common Learning Experience	Learning Target	Success Criteria/ Assessment	Resources
<p>5.Grow.1 Use an online catalog to locate print materials on topics of interest</p> <p>Use school databases to locate information on topics of interest or curricular topics</p>	<p>I can think of things I already know to help me with new information.</p> <p>I can use an organizational system to locate materials.</p>	Use search skills to drive deeper inquiry into a topic of interest or curricular topic.	<p>Online Databases Print Materials Media in Multiple Formats</p>

<p>5.Grow.2 Opportunities to self-select and read a variety of books, texts</p> <p>(e.g. Book Tastings, Investigate Self Selected Topics, Use the research process, Complete research projects</p>	<p>I can always continue my work on learning.</p> <p>I can read books with different genres and topics and respond to questions about my reading.</p> <p>I can show things I have learned by connecting it to the real world.</p> <p>I can adjust my awareness of diverse perspectives during learning activities.</p> <p>I can demonstrate empathy and equity in other perspectives during learning activities.</p>	<p>Participate in ongoing sustained inquiry by seeking knowledge, making connections and using reflection.</p> <p>Read a variety of books with different perspectives and respond to questions verbally and in writing</p>	<p>Online Databases Print Materials Media in Multiple Formats</p>
<p>5.Grow.3 Coding</p> <p>Tinkering and Making</p> <p>Digital Drawing</p>	<p>I can persevere through tinkering and making challenges.</p> <p>I can use logical thinking to solve a problem.</p>	<p>Complete a variety of challenges involving coding, tinkering, making and digital drawing</p>	<p>Maker Materials Media in Multiple Formats</p>

Module Title:

Module 4: Presentation of Information (Show)

Relevant Standards: Bold indicates priority

AASL	CCS	ISTE
I.B.3 Create Learners engage with new knowledge by following a process that includes: 3. Generating products that illustrate learning.	W.6	4A
II.B.3 Create [K-3 in Nutmeg Common Experience] Learners adjust their awareness of the global learning community by: 3. Representing diverse perspectives during learning activities.	W.6	7D
III.B.1 Create Learners participate in personal, social, and intellectual networks by: 1. Using a variety of communication tools and resources.	W.6	1C
III.D.1 Grow Learners actively participate with others in learning situations by: 1. Actively contributing to group discussions.	SL.1	7C
V.A.1 Think Learners develop and satisfy personal curiosity by: 1. Reading widely and deeply in multiple formats and write and create for a variety of purposes.	RI.10 RL.10	3D
VI.C.2 Share Learners responsibly, ethically, and legally share new information with a global community by: 2. Disseminating new knowledge through means appropriate for the intended audience.	W.8 SL.2	2C

Essential Question(s):

1. How do I interact with others to discuss fifth grade topics?
2. How do I use productivity tools to create and share a project?
3. How do I give credit to other people's work in my presentation?
4. What are the ways I can "show what I know"?

Enduring Understanding(s):

Use digital technology, communication tools, and/or networks to access, manage, integrate, evaluate, and create information in order to function in a knowledge society

Use information accurately and creatively for the issue or problem at hand

Understand both how and why media messages are constructed, and for what purpose

Manage the flow of information from a wide variety of sources

Apply a fundamental understanding of the ethical/ legal issues surrounding the access and use of information

Demonstration of Learning:	Pacing for Unit
Digital Artifact Creation	Addressed and spiraled throughout the year
Family Overview (link below)	Integration of Technology:
Grade 5 Family Overview	<i>Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning</i>
Unit-specific Vocabulary:	Aligned Unit Materials, Resources, and Technology (beyond core resources):
Process Products Communication Resources Tools Audience Participate	Digital Productivity Tools
Opportunities for Interdisciplinary Connections:	Anticipated misconceptions:
Connect to ELA units. Connect to science and social studies topics.	The teacher is the only audience of finished work. Sharing work isn't part of the research process. Google Slides is the best way to present information.
Connections to Prior Units:	Connections to Future Units:
Continuation of module in Grade 4	Continuation of module in Grade 6
Differentiation through <i>Universal Design for Learning</i>	
UDL Indicator	Teacher Actions:
5.1 ACTION 7 EXPRESSION > Expression & Communication: Use multiple media for communication	<ul style="list-style-type: none"> - Compose in multiple media such as text, speech, drawing, illustration, comics, storyboards, design, film, music, dance/movement, visual art, sculpture, or video - Use physical manipulatives (e.g., blocks, 3D models) - Use interactive web tools (e.g., storyboards, comic strips, animation presentations) - Solve problems using a variety of strategies
7.1 ENGAGEMENT > Recruiting Interest: Optimize individual choice and autonomy	<p>Provide learners with as much discretion and autonomy as possible by providing choices in such things as:</p> <ul style="list-style-type: none"> - The level of perceived challenge - The context or content used for practicing and assessing skills - The tools used for information gathering or production - The color, design, or graphics of layouts, etc. - The sequence or timing for completion of subcomponents of tasks
Supporting Multilingual/English Learners	
Related <i>CELP standards:</i>	Learning Targets:

4-5.3: speak and write about grade-appropriate complex literary and informational texts and topics.		With prompting and supports: <ul style="list-style-type: none"> • I can deliver short oral presentations... • I can write texts with drawings or illustrations... • I can use academic and domain specific words... about familiar texts, topics, and experiences.	
Common Learning Experience	Learning Target	Success Criteria/ Assessment	Resources
5.Show.1 Use digital productivity tools to showcase information and learning. Create digital presentations such as slide decks, posters, or infographics.	I can create a product that shows what I have learned.	Generate products that illustrate learning.	Digital Productivity Tools
5.Show.2 Use the sharing features available in digital productivity tools to communicate with others in order to generate products that showcase information and learning.	I can draw, write, type or use video with others to show my learning or my opinion.	Use a variety of communication tools to share work and/or provide feedback to others.	Digital Productivity Tools
5.Show.3 Include a reference to where information was found during creation of a product.	I can responsibly share new information in the way that works best for my audience.	Ethically and legally share new information through best means for the intended audience.	Digital Productivity Tools

Course Title:	Content Area:	Grade Level:	Credit (if applicable)
Grade 6 Library Media	Library Media	6	
Course Description:			
<p>The school library media programs of Bristol Public Schools facilitate opportunities for students and faculty to become lifelong learners who thrive in complex learning environments. Through instructional strategies designed to infuse inquiry and technology as tools for learning, students will develop skills to interpret and develop new understandings, seek diverse perspectives, create new knowledge, and grow as ethical, digital citizens. Through equitable access to reading and information resources, the library media programs promote lifelong reading in a safe environment conducive to learning.</p>			
Aligned Core Resources:		Connection to the <i>BPS Vision of the Graduate</i>	
N/A		<p>Media Literacy</p> <ul style="list-style-type: none"> ● Understand both how and why media messages are constructed, and for what purpose ● Examine how individuals interpret messages differently, how values and points of view are included or excluded, and how media can influence beliefs and behaviors ● Apply a fundamental understanding of the ethical/legal issues surrounding the access and use of media <p>Communications and Technology Literacy</p> <ul style="list-style-type: none"> ● Use digital technology, communication tools, and/or networks to access, manage, integrate, evaluate, and create information in order to function in a knowledge society <p>Information Literacy</p> <ul style="list-style-type: none"> ● Access information on efficiently (time) and effectively (sources) ● Evaluate information critically and competently ● Use information accurately and creatively for the issue or problem at hand ● Manage the flow of information from a wide variety of sources ● Apply a fundamental understanding of the ethical/legal issues surrounding the access and use of information 	
Additional Course Information: <i>Knowledge/Skill Dependent courses/prerequisites</i>		Link to <i>Completed Equity Audit</i>	
N/A		Library Media Curriculum Audit	

Standard Matrix

Standards	Module 1	Module 2	Module 3	Module 4
CT Core Standards				
RI 6.2 Determine a central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.		X		X
W 6.6 Use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others.				X
W 6.7 Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.		X	X	
W 6.8 Gather relevant information from multiple print and digital sources; assess the credibility of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and providing basic bibliographic information for sources.	X	X		
W 6.9 Draw evidence from informational texts to support analysis, reflection, and research.		X		
SL 6.2 Interpret information presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how it contributes to a topic, text, or issue under study.		X		X
American Association of School Librarian Standards (AASL Standards)				
INQUIRE: Build new knowledge by inquiring, thinking critically, identifying problems, and developing strategies for solving problems. I.A.1-2 Think Learners display curiosity and initiative by: 1. Formulating questions about a personal interest or a curricular topic. 2. Recalling prior and background knowledge as context for new meaning. <i>ISTE</i> 3. <i>Knowledge Constructor</i> 3a. <i>Students plan and employ effective research strategies to locate information and other resources for their intellectual or create pursuits.</i>		X	X	

<p>3b. Students evaluate the accuracy, perspective, credibility and relevance of information, media, data or other resources. 3c. Students curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions</p>				
<p>INQUIRE 1.B.1 Create Learners engage with new knowledge by following a process that includes: 1. Using evidence to investigate questions. <i>ISTE</i> 4. Innovative Designer 4a. Students select and use digital tools to plan and manage a design process that considers design constraints and calculated risks.</p>		X		
<p>INQUIRE 1.B.3 Create Learners engage with new knowledge by following a process that includes: 3. Generating products that illustrate learning. <i>ISTE</i> 4. Innovative Designer 4a. Students select and use digital tools to plan and manage a design process that considers design constraints and calculated risks.</p>				X
<p>INQUIRE 1.C.2-3 Share Learners adapt, communicate and exchange learning products with others in a cycle that includes: 2. Providing constructive feedback 3. Acting on feedback to improve <i>ISTE</i> 1. Empowered Learner 1c. Students use technology to seek feedback that informs and improves their practice and to demonstrate their learning in a variety of ways.</p>			X	
<p>INQUIRE 1.D.1-4 Grow Learners participate in an ongoing inquiry-based process by: 1. Continually seeking knowledge. 2. Engaging in sustained inquiry. 3. Enacting new understanding through real-world connections. 4. Using reflection to guide informed decisions. <i>ISTE</i> 3. Knowledge Constructor 3d. Students build knowledge by actively exploring real-world issues and problems, developing ideas and theories and pursuing answers and solutions.</p>			X	

<p>INCLUDE: Demonstrate an understanding of and commitment to inclusiveness and respect for diversity in the learning community.</p> <p>II.A.2 Think</p> <p>Learners contribute a balanced perspective when participating in a learning community by:</p> <p>2. Adopting a discerning stance toward points of view and opinions expressed in information resources and learning products.</p> <p>ISTE N/A</p>			X	
<p>COLLABORATE: Work effectively with others to broaden perspectives and work toward common goals</p> <p>III.B.1 Create</p> <p>Learners participate in personal, social, and intellectual networks by:</p> <p>1. Using a variety of communication tools and resources.</p> <p>ISTE</p> <p>6. <i>Creative Communicator</i></p> <p>6a. <i>Students chose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.</i></p> <p>7. <i>Global Collaborator</i></p> <p>7b. <i>Students use collaborative technologies to work with others, including peers, experts or community members, to examine issues and problems from multiple viewpoints.</i></p>	X			X
<p>CURATE: Make meaning for oneself and others by collecting, organizing, and sharing resources of personal relevance.</p> <p>IV.A.1-3 Think</p> <p>Learners act on an information need by:</p> <p>1. Determining the need to gather information.</p> <p>2. Identifying possible sources of information. 3. Making critical choices about information sources to use.</p> <p>ISTE</p> <p>3. <i>Knowledge Constructor</i></p> <p>3c. <i>Students curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions.</i></p>		X		
<p>CURATE</p> <p>IV.B.1-4 Create</p> <p>Learners gather information appropriate to the task by:</p> <p>1. Seeking a variety of sources.</p> <p>2. Collecting information representing diverse perspectives.</p> <p>3. Systematically questioning and assessing the validity and accuracy of information.</p> <p>4. Organizing information by priority, topic, or other systematic scheme.</p> <p>ISTE</p>		X		

<p>6. <i>Creative Communicator</i> 6a. <i>Students choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication</i></p>				
<p>EXPLORE: Discover and innovate in a growth mindset developed through experience and reflection. V.A.1, 3 Think Learners develop and satisfy personal curiosity by: 1. Reading widely and deeply in multiple formats and write and create for a variety of purposes. 3. Engaging in inquiry-based processes for personal growth. <i>ISTE</i> 6. <i>Creative Communicator</i> 6c. <i>Students communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations.</i></p>		X	X	
<p>EXPLORE V.C.1 Share Learners engage with the learning community by: 1. Expressing curiosity about a topic of personal interest or curricular relevance. <i>ISTE</i> 7. <i>Global Communicator</i> 7d. <i>Students explore local and global issues and use collaborative technologies to work with others to investigate solutions.</i></p>		X	X	
<p>ENGAGE: Demonstrate safe, legal, and ethical creating and sharing of knowledge products independently while engaging in a community of practice and an interconnected world. VI.A.1-3 Think Learners follow ethical and legal guidelines for gathering and using information by: 1. Responsibly applying information, technology, and media to learning. 2. Understanding the ethical use of information, technology, and media. 3. Evaluating information for accuracy, validity, social and cultural context, and appropriateness for need. <i>ISTE</i> 2. <i>Digital Citizen</i> 2c. <i>Demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property</i></p>	X	X		
<p>ENGAGE VI.B.1-2 Create Learners use valid information and reasoned conclusions to make ethical decisions in the creation of knowledge by: 1. Ethically using and reproducing others' work. 2. Acknowledging authorship and demonstrating respect for the intellectual property of others.</p>	X			X

<p><i>ISTE</i> 2. Digital Citizen 2c. Demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property</p>				
<p>ENGAGE VI.C.1-2 Share Learners responsibly, ethically, and legally share new information with a global community by: 1. Sharing information resources in accordance with modification, reuse, and remix policies. 2. Disseminating new knowledge through means appropriate for the intended audience.</p> <p><i>ISTE</i> 2. Digital Citizen 2c. Demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property. 6. Creative Communicator 6d. Students publish or present content that customizes the message and medium for their intended audience.</p>	X			X

Module Links

If unit headings are formatted as a heading, then we can link a Table of Contents to better organize and provide faster access to each unit

[Unit 1: Digital Citizenship](#)

[Unit 2: Information and Media Literacy](#)

[Unit 3: Growth \(Inquiry and Curiosity\)](#)

[Unit 4: Presentation of Information](#)

Module 1

Unit 1: Digital Citizenship

Relevant Standards: Bold indicates priority

CT Core Standard

W 6.8

Gather relevant information from multiple print and digital sources; assess the credibility of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and providing basic bibliographic information for sources.

AASL Standard

Collaborate - Create

III.B.1

Learners participate in personal, social, and intellectual networks by:

1. Using a variety of communication tools and resources.

ISTE

6. Creative Communicator

6a. Students chose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.

7. Global Collaborator

7b. Students use collaborative technologies to work with others, including peers, experts or community members, to examine issues and problems from multiple viewpoints.

AASL Standard

Engage - Think

VI.A.1-3

Learners follow ethical and legal guidelines for gathering and using information by:

1. Responsibly applying information, technology, and media to learning.

2. Understanding the ethical use of information, technology, and media.

3. Evaluating information for accuracy, validity, social and cultural context, and appropriateness for need.

ISTE

2. Digital Citizen

2c. Demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property

AASL Standard

Engage - Create

VI.B.1-2

Learners use valid information and reasoned conclusions to make ethical decisions in the creation of knowledge by:

1. Ethically using and reproducing others' work.

2. Acknowledging authorship and demonstrating respect for the intellectual property of others.

ISTE

2. Digital Citizen

2c. Demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property

AASL Standard

Engage - Share

VI.C.1-2

Learners responsibly, ethically, and legally share new information with a global community by:

1. Sharing information resources in accordance with modification, reuse, and remix policies.

2. Disseminating new knowledge through means appropriate for the intended audience.

ISTE

2. Digital Citizen

2c. Demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property.

6. Creative Communicator

6d. Students publish or present content that customizes the message and medium for their intended audience.

Essential Question(s):

1. What are the rights and responsibilities of a digital citizen?
2. What are the various types of digital media?
3. How do we use different types of media appropriately and safely?

Enduring Understanding(s):

Students recognize the rights, responsibilities and opportunities of living, learning and working in an interconnected digital world, and they act and model digital citizenship in ways that are safe, legal and ethical.

<p>4. How do I avoid plagiarism by using a standard format of citation to acknowledge the work of others?</p> <p>5. How can I responsibly and ethically use artificial intelligence (AI) in school?</p>	
<p>Demonstration of Learning:</p>	<p>Pacing for Unit</p>
<p>Students will create a digital citizenship PSA (Brochures, Ads or Posters).</p>	<p>Addressed throughout school year</p>
<p>Family Overview (link below)</p>	<p>Integration of Technology:</p>
<p>Family Overview</p>	<p><i>Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning</i></p>
<p>Unit-specific Vocabulary:</p>	<p>Aligned Unit Materials, Resources, and Technology (beyond core resources):</p>
<p>Acceptable Use Policy Bibliography Publisher Artificial Intelligence Bibliography Communication Creative Commons Digital Dilemmas Ethical/legal use Evaluate Validity Print/digital sources Decision Authorship Respect Quote Paraphrase Plagiarism Citation Works Cited Modify Audience</p>	<p>Technology</p>
<p>Opportunities for Interdisciplinary Connections:</p>	<p>Anticipated misconceptions:</p>
<ul style="list-style-type: none"> • Any discipline requiring research or shared knowledge learned from sources. • Any discipline that requires students to work/collaborate in a digital environment. • Social Studies Guaranteed Research Experience Projects (GRE) • English Language Arts summative essays. • Social Studies Inquiry Design Model Projects (IDMs). 	<p>The URL constitutes a citation.</p>

Connections to Prior Units:		Connections to Future Units:	
<ul style="list-style-type: none"> Grade 5 Digital Citizenship Unit 		<ul style="list-style-type: none"> Grade 7 Digital Citizenship Unit 	
Differentiation through Universal Design for Learning			
UDL Indicator		Teacher Actions:	
<p>GUIDELINE 7: Recruiting Interest CHECKPOINT 7.1 Optimize Individual Choice and Autonomy</p> <p>GUIDELINE 6: Executive Functions CHECKPOINT 6.3 Facilitate Managing Information and Resources</p>		<p>Provide learners with as much discretion and autonomy as possible by providing choices in such things as:</p> <ul style="list-style-type: none"> the tools used for information gathering or production the color, design, or graphics of layouts, etc. <p>Provide learners a variety of internal scaffolds and external organizational aids. For example:</p> <ul style="list-style-type: none"> Provide graphic organizers and templates for data collection and organizing information. Provide checklists and guides for note-taking. 	
Supporting Multilingual/English Learners			
Related CELP standards:		Learning Targets:	
<p>CELP Standard 6-8.2 An EL can participate in grade - appropriate oral and written exchanges of information, ideas, and analyses, responding to peer, audience, or reader comments and questions.</p>		<p>I can</p> <ul style="list-style-type: none"> Participate in extended conversation, discussions, and written exchanges about a variety of topics, texts, and issues using academic and domain specific vocabulary. Build on ideas of others Express ideas clearly Pose and respond to relevant questions Add relevant and specific evidence Summarize the key ideas Reflect on the key ideas expressed 	
Common Learning Experiences	Learning Target	Success Criteria/ Assessment	Resources
Shared Google Doc/Slides Digital Citizenship Activity	I can appropriately and safely use digital tools to collaborate with others.	I can use a variety of communication tools and resources to work effectively with others.	Google Productivity Suite
Social Studies Guaranteed Research Experience (GRE) Social Studies Inquiry Design Model Projects (IDMs) English Language Art Summative Essays	I can use a standard format of citation to acknowledge the work of others.	I can use Google to create a citation. I can use Google to create and insert an in-text citation. I can use Google to create a works cited page.	Google Productivity Suite Google Citation and Works Cited Generator Noodle Tools

		I can format an essay using MLA style.	
Creative Commons Digital Art Project	I can understand the benefits of using Creative Commons for sharing creative works.	I can use a digital tool to build a creative work. I can select a Creative Commons license and apply it to my creative work.	Google Drawings
Digital Citizenship PSA Project Format - Presentations, Infographics, Electronic Posters, Screencast, Podcast, Website etc... Topics - Media Balance & Well-Being, Privacy & Security, Cyberbullying, Digital Drama, Digital Footprint & Identity, Relationships & Communication etc...	I can create new learning using digital tools following copyright policy.	I can share information resources in accordance with modification, reuse, and remix policies	Google Productivity Suite Flipgrid Padlet Pear Deck Canva
Digital Dilemmas Activity	I can analyze a digital dilemma scenario and apply my understanding of digital citizenship and online safety to recommend an appropriate course of action.	I can Identify the key issues and ethical considerations present in the digital dilemma scenario. I can demonstrate knowledge of digital citizenship principles like online privacy, cyberbullying, digital footprints, etc. I can explain the potential risks and consequences associated with different choices I can propose a solution that upholds ethical online behavior and internet safety practices. I can justify their recommended approach using logical reasoning	Digital Dilemma Cards Google Productivity Suite

		and evidence.	
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Module 2

Unit 2: Information and Media Literacy

Relevant Standards: Bold indicates priority

CT Core Standards

W 6.8

Gather relevant information from multiple print and digital sources; assess the credibility of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and providing basic bibliographic information for sources.

AASL Standard

Inquire - Think

I.A.1-2

Learners display curiosity and initiative by:

1. Formulating questions about a personal interest or a curricular topic.
2. Recalling prior and background knowledge as context for new meaning.

ISTE

3. Knowledge Constructor

3a. Students plan and employ effective research strategies to locate information and other resources for their intellectual or create pursuits.

3b. Students evaluate the accuracy, perspective, credibility and relevance of information, media, data or other resources. 3c. Students curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions

AASL Standard

Inquire - Create

I.B.1 Create

Learners engage with new knowledge by following a process that includes:

1. Using evidence to investigate questions.

ISTE

4. Innovative Designer

4a. Students select and use digital tools to plan and manage a design process that considers design constraints and calculated risks.

AASL Standard

Curate - Think

IV.A.1-3

Learners act on an information need by:

1. Determining the need to gather information.
2. Identifying possible sources of information. 3. Making critical choices about information sources to use.

ISTE

3. Knowledge Constructor

3c. Students curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions.

AASL Standard

Curate - Create

IV.B.1-4

Learners gather information appropriate to the task by:

1. Seeking a variety of sources.
2. Collecting information representing diverse perspectives.
3. Systematically questioning and assessing the validity and accuracy of information.
4. Organizing information by priority, topic, or other systematic scheme.

ISTE

6. Creative Communicator

6a. Students choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication

AASL Standard

Explore- Think

V.A.1,3

Learners develop and satisfy personal curiosity by:

1. Reading widely and deeply in multiple formats and write and create for a variety of purposes.
3. Engaging in inquiry-based processes for personal growth.

ISTE

6. Creative Communicator

6c. Students communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations.

AASL Standard

Explore - Share

V.C.1

Learners engage with the learning community by:

1. Expressing curiosity about a topic of personal interest or curricular relevance.

ISTE

7. Global Communicator

7d. Students explore local and global issues and use collaborative technologies to work with others to investigate solutions.

AASL Standard

Engage - Think

VI.A.1-3

Learners follow ethical and legal guidelines for gathering and using information by:

1. Responsibly applying information, technology, and media to learning.
2. Understanding the ethical use of information, technology, and media.
3. Evaluating information for accuracy, validity, social and cultural context, and appropriateness for need.

ISTE

2. Digital Citizen

2c. Demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property

Essential Question(s):

1. What are the most effective internet search strategies?
2. How can I evaluate search results to refine my searches and select sources?
3. How can I focus my research to answer a question?
4. How can I gather relevant information from a variety of credible and accurate sources?
5. How can I use information from a variety of grade appropriate sources to support claims and answer questions?

Enduring Understanding(s):

Students critically curate a variety of resources using digital tools to construct knowledge, produce creative artifacts and make meaningful learning experiences for themselves and others.

<ul style="list-style-type: none"> 6. What is fake news? 7. What are the different types of media? 8. What is artificial intelligence? 9. How does artificial intelligence work? 10. How can artificial intelligence be used to answer research questions? 	
Demonstration of Learning:	Pacing for Unit
Students will create a short research project	Addressed throughout school year
Family Overview (link below)	Integration of Technology:
Family Overview	Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning
Unit-specific Vocabulary:	Aligned Unit Materials, Resources, and Technology (beyond core resources):
<ul style="list-style-type: none"> Accuracy Advertisements Assess Boolean Broad Collect Critical Curiosity Determine Engage Ethical/legal Evidence fabricated content fake news false context Identify imposter content Initiative Investigate manipulated content media Narrow Organic Results Prior/Background knowledge Priority Prompt Question Recall Related Searches Relevance Research Question Satire Scheme Search Bar 	Technology

Search Engine Search Results Search Tools Seek snippets Social/Cultural context Sources Systematic Tools Topic URL Validity			
Opportunities for Interdisciplinary Connections:	Anticipated misconceptions:		
Any discipline requiring research, or sharing knowledge learned from other sources	Everything on the Internet is true. I can get all of my information for research from one source. Copying and pasting is note taking.		
Connections to Prior Units:	Connections to Future Units:		
<ul style="list-style-type: none"> Grade 5 Information and Media Literacy Unit 	<ul style="list-style-type: none"> Grade 7 Information and Media Literacy Unit 		
Differentiation through <i>Universal Design for Learning</i>			
UDL Indicator	Teacher Actions:		
GUIDELINE 2: Language & Symbols CHECKPOINT 2.1 Clarify vocabulary and symbols	<ul style="list-style-type: none"> Pre-teach vocabulary and symbols, especially in ways that promote connection to the learners' experience and prior knowledge Embed support for vocabulary and symbols within the text (e.g., hyperlinks or footnotes to definitions, explanations, illustrations, previous coverage, translations) 		
Supporting Multilingual/English Learners			
Related <i>CELP standards:</i>	Learning Targets:		
CELP 6-8.5 An EL can conduct research and evaluate and communicate findings to answer questions or solve problems.	<p>I can</p> <ul style="list-style-type: none"> Conduct short research projects to answer a question Gather information from multiple print and digital sources Use search terms effectively Evaluate the credibility of each source Quote or paraphrase the data and conclusions of others using charts, diagrams, or other graphics, as appropriate Integrate information into an organized oral or written report Cite sources Use a standard format for citations 		
Common Learning Experiences	Learning Target	Success Criteria/ Assessment	Resources

<p>Boolean Venn Diagram Activity</p> <p>Boolean Interactive Game</p>	<p>I can use search strategies to conduct effective internet searches.</p>	<p>I can explain how a search engine works.</p> <p>I can use Boolean search terms.</p> <p>I can use a Venn diagram to represent a Boolean internet search.</p>	<p>Search Engines</p> <p>Google Productivity Suite</p>
<p>Database Exploration</p>	<p>I can use search strategies to conduct effective internet searches.</p>	<p>I can explain the key features of a database.</p> <p>I can use the features of a database.</p>	<p>Databases</p>
<p>Search Results Page Infographic</p>	<p>I can evaluate search results to refine my searches and select sources.</p>	<p>I can identify and define the components of a search result page</p>	<p>Search Engines</p> <p>Google Productivity Suite</p> <p>Infographic Checklist</p>
<p>T.R.A.A.P. Activity</p>	<p>I can evaluate search results to refine my searches and select sources.</p>	<p>I can determine the timeliness of a website.</p> <p>I can determine the relevance of a website.</p> <p>I can determine the purpose of a website.</p>	<p>Search Engines</p> <p>Google Productivity Suite</p> <p>T.R.A.A.P. Graphic Organizer</p>
<p>Analyzing Research Questions</p> <p>Research Question Sorting Activity (Goldilocks Test)</p>	<p>How can I focus my research to answer a question?</p>	<p>I can describe research questions as narrow, broad or acceptable.</p>	<p>Google Productivity Suite</p>
<p>Cornell Note Taking Activity</p>	<p>I can gather relevant information from a variety of credible and accurate sources.</p> <p>I can use information from a variety of sources to support claims and answer questions.</p>	<p>I can take notes.</p> <p>I can paraphrase.</p> <p>I can gather relevant information from a variety of credible and accurate sources.</p> <p>I can use information from a variety of sources to support claims and answer questions.</p>	<p>Google Productivity Suite</p> <p>Preselected Websites</p>

<p>Fake News Sorting Activity</p>	<p>I can define fake news.</p> <p>I can understand the history of fake news.</p> <p>I can define the different types of fake news.</p>	<p>I can analyze fake news stories and identify the type of fake news.</p> <p>I can write the definitions of the different types of fake news.</p>	<p>Five Types of Misinformation Infographic (Satire, False Context, Imposter Content, Fabricated Content, Manipulated Content)</p> <p>Google Productivity Suite</p>
<p>Diverse Media Personal Inventory</p> <p>Media Campaign Poster</p>	<p>I can recognize different types of media.</p>	<p>I can select and describe different types of media.</p> <p>I can explain my personal experience with different types of media.</p> <p>I can select one type of media and promote its benefits.</p>	<p>Google Productivity Suite</p>
<p>AI (Artificial Intelligence) Introduction</p>	<p>I can define artificial intelligence (AI) and explain its key characteristics.</p> <p>I can describe the basic process of machine learning and how AI systems are "trained" on data.</p>	<p>I can write a clear and accurate definition of AI in my own words.</p> <p>I can create a digital flow chart to explain the overall process of machine learning.</p>	<p>Common Sense Media Artificial Intelligence Lessons</p>
<p>AI Prompt Craft Activity</p>	<p>I can use an AI assistant to find relevant information and answer research questions.</p>	<p>I can identify the essential elements of a well-crafted AI prompt (C.R.A.F.T.).</p> <p>I can use the C.R.A.F.T graphic organizer to create effective ai prompts.</p>	

Module 3

Unit 3: Growth (Curiosity & Discovery)

Relevant Standards: **Bold** indicates priority

CT Core Standard **W 6.7**

Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.

AASL Standard**Inquire - Think**

I.A.1-2

Learners display curiosity and initiative by:

1. Formulating questions about a personal interest or a curricular topic.
2. Recalling prior and background knowledge as context for new meaning.

ISTE

3. Knowledge Constructor

3a. Students plan and employ effective research strategies to locate information and other resources for their intellectual or create pursuits.

3b. Students evaluate the accuracy, perspective, credibility and relevance of information, media, data or other resources. 3c. Students curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions

AASL Standard**Inquire - Grow**

I.D.1-4

Learners participate in an ongoing inquiry-based process by:

1. Continually seeking knowledge.
2. Engaging in sustained inquiry.
3. Enacting new understanding through real-world connections.
4. Using reflection to guide informed decisions.

ISTE

3. Knowledge Constructor

3d. Students build knowledge by actively exploring real-world issues and problems, developing ideas and theories and pursuing answers and solutions.

AASL Standard**Include -Think**

II.A.2

Learners contribute a balanced perspective when participating in a learning community by:

2. Adopting a discerning stance toward points of view and opinions expressed in information resources and learning products.

AASL Standard**Explore -Think**

V.A.1,3 Think

Learners develop and satisfy personal curiosity by:

1. Reading widely and deeply in multiple formats and write and create for a variety of purposes.
3. Engaging in inquiry-based processes for personal growth.

ISTE

6. Creative Communicator

6c. Students communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations.

Essential Question(s):

1. How do I use curiosity from past experiences to discover new learning?
2. How do I use reflection to refocus my inquiry?
3. How do I develop and communicate my own Perspective?
4. How can I grow as a reader by reading widely and deeply in multiple formats?

Enduring Understanding(s):

Discover and innovate in a growth mindset developed through experience and reflection.

Demonstration of Learning:**Pacing for Unit**

Students will create a book review for a library book	Addressed throughout school year
Family Overview (link below)	Integration of Technology:
Family Overview	<i>Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning</i>
Unit-specific Vocabulary:	Aligned Unit Materials, Resources, and Technology (beyond core resources):
Curiosity Prior knowledge New meaning Seek Inquiry Connections Decisions Perspective Stance Point of view Opinion	Technology
Opportunities for Interdisciplinary Connections:	Anticipated misconceptions:
Any discipline requiring research, or sharing knowledge learned from other sources	There is always a right answer (or one answer) to a question. It's wrong to question/challenge another person's perspective. The teacher is always right.
Connections to Prior Units:	Connections to Future Units:
<ul style="list-style-type: none"> Grade 5 Growth (Inquiry and Curiosity) Unit 	<ul style="list-style-type: none"> Grade 7 Growth (Inquiry and Curiosity) Unit
Differentiation through Universal Design for Learning	
UDL Indicator	Teacher Actions:
GUIDELINE 9 Provide options for Self Regulation CHECKPOINT 9.1 Promote expectations and beliefs that optimize motivation	Multiple options need to be given to learners to help them stay motivated. <ul style="list-style-type: none"> Provide prompts, reminders, guides, rubrics, checklists that focus on: <ul style="list-style-type: none"> Elevating the frequency of self-reflection and self-reinforcements Support activities that encourage self-reflection and identification of personal goals
Supporting Multilingual/English Learners	
Related CELP standards:	Learning Targets:
CELP Standard 6-8.2 An EL can participate in grade - appropriate oral and written exchanges of information, ideas, and analyses,	I can <ul style="list-style-type: none"> Participate in extended conversation, discussions, and written exchanges about a

<p>responding to peer, audience, or reader comments and questions.</p>	<p>variety of topics , texts, and issues using academic and domain specific vocabulary.</p> <ul style="list-style-type: none"> - Build on ideas of others - Express ideas clearly - Pose and respond to relevant questions - Add relevant and specific evidence - Summarize the key ideas - Reflect on the key ideas expressed 		
Common Learning Experiences	Learning Target	Success Criteria/ Assessment	Resources
<p>Student-led Book Talks (Public Speaking Book Promotion)</p>	<p>I can evaluate the strengths and weaknesses of a book and provide evidence to support my opinions.</p> <p>I can effectively communicate my ideas, opinions, and recommendations about a book</p>	<p>I can summarize main plot points, characters, themes author's writing style, character development, and use of literary devices.</p> <p>I can incorporate multimedia components like images, video clips, or props to enhance my presentation.</p> <p>I can respond to audience questions about the book</p>	<p>Book Talk Menu</p> <p>Book Talk Guidelines</p> <p>Viewer Scoring Rubric</p> <p>Destiny Discover Online Library Catalog</p> <p>Google Productivity Suite Digital Media</p> <p>Communication Platforms</p>
<p>Student Choice Personal Interest Research Project</p>	<p>I can explore my interests in depth.</p> <p>I can communicate my own perspective.</p>	<p>I can use research skills to discover new topics, resources, or opportunities related to my passions.</p> <p>I can use research skills to communicate my ideas.</p>	<p>Google Productivity Suite</p> <p>Search Engines</p> <p>Databases</p> <p>Digital Communication Platforms</p>
<p>Book Check Out Process</p>	<p>I can select, locate and check out library books based on interests.</p>	<p>I can access and use the library's online catalogs to find suitable reading materials.</p> <p>I can navigate the library's organization system and locate books in different sections or collections.</p>	<p>Destiny Discover</p>
<p>Book Advertisement Project Book Talks (Digital Book Promotion)</p>	<p>I can grow as a reader.</p>	<p>I can set reading goals.</p> <p>I can allocate a specific amount of time for reading.</p> <p>I can use the library online catalog to locate books</p>	<p>Destiny Discover Online Library Catalog</p> <p>Google Productivity Suite Digital Media</p> <p>Communication Platforms</p>

		that meet my personal interests. I can create an advertisement for a book that interests me.	
Independent Reading Participating in Library Reading Programs	I can read grade-level texts with deep understanding over an extended period of time.	I can maintain my focus and concentration while reading for an extended time without becoming distracted.	Library Books

Module 4

Unit 4: Show (Presentation of Information)

Relevant Standards: **Bold indicates priority**

CT Core Standards

RI 6.2

Determine a central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.

W 6.6

Use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others.

SL 6.2

Interpret information presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how it contributes to a topic, text, or issue under study.

AASL Standard

Inquire - Create

I.B.3

Learners engage with new knowledge by following a process that includes:

3. Generating products that illustrate learning.

ISTE

4. Innovative Designer

4a. Students select and use digital tools to plan and manage a design process that considers design constraints and calculated risks.

AASL Standard

Collaborate - Create

III.B.1

Learners participate in personal, social, and intellectual networks by:

1. Using a variety of communication tools and resources.

ISTE

6. Creative Communicator

6a. Students chose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.

7. Global Collaborator

7b. Students use collaborative technologies to work with others, including peers, experts or community members, to examine issues and problems from multiple viewpoints.

**AASL Standard
Engage - Create
VI.B.1-2**

Learners use valid information and reasoned conclusions to make ethical decisions in the creation of knowledge by:

1. Ethically using and reproducing others' work.
2. Acknowledging authorship and demonstrating respect for the intellectual property of others.

ISTE

2. Digital Citizen

2c. Demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property

**AASL Standard
Engage - Share
VI.C.1-2**

Learners responsibly, ethically, and legally share new information with a global community by:

1. Sharing information resources in accordance with modification, reuse, and remix policies.
2. Disseminating new knowledge through means appropriate for the intended audience.

ISTE

2. Digital Citizen

2c. Demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property.

6. Creative Communicator

6d. Students publish or present content that customizes the message and medium for their intended audience.

Essential Question(s):	Enduring Understanding(s):
<ol style="list-style-type: none"> 1. How do I communicate what I have learned to my audience? 2. How can I use digital media to communicate with an authentic audience? 3. How do I give credit to other people's work in my presentation? 	<p>Students communicate clearly and express themselves creatively for a variety of purposes using the platforms, tools, styles, formats and digital media appropriate to their goals.</p>
Demonstration of Learning:	Pacing for Unit
<p>Students will create a digital media presentation.</p>	<p>Addressed throughout school year</p>
Family Overview (link below)	Integration of Technology:
<p>Family Overview</p>	<p><i>Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning</i></p>
Unit-specific Vocabulary:	Aligned Unit Materials, Resources, and Technology (beyond core resources):
<p>Intellectual networks Communication Valid Ethical Authorship Intellectual property Global community Reuse</p>	<p>Technology</p>

Remix Disseminating			
Opportunities for Interdisciplinary Connections:		Anticipated misconceptions:	
Any discipline requiring research, or sharing knowledge learned from other sources		You don't have to cite a picture. "Google" is the citation for a picture. I can use music if I can find it. Google is where I get all my information.	
Connections to Prior Units:		Connections to Future Units:	
<ul style="list-style-type: none"> Grade 5 Show (Presentation of Information) Unit 		<ul style="list-style-type: none"> Grade 7 Show (Presentation of Information) Unit 	
Differentiation through <i>Universal Design for Learning</i>			
UDL Indicator		Teacher Actions:	
GUIDELINE 3 Provide options for Comprehension CHECKPOINT 3.4 Maximize transfer and generalization		Supports for memory, generalization, and transfer include techniques that are designed to heighten the memorability of the information, as well as those that prompt and guide learners to employ explicit strategies. <ul style="list-style-type: none"> Provide checklists, organizers, sticky notes, electronic rem-inders Prompt the use of mnemonic strategies and devices (e.g., visual imagery, paraphrasing strategies, method of loci, etc.) Incorporate explicit opportunities for review and practice Provide templates, graphic organizers, concept maps to support note-taking Provide scaffolds that connect new information to prior knowledge (e.g., word webs, half-full concept maps) Embed new ideas in familiar ideas and contexts (e.g., use of analogy, metaphor, drama, music, film, etc.) Offer opportunities over time to revisit key ideas and linkages between ideas 	
Supporting Multilingual/English Learners			
Related <i>CELP standards:</i>		Learning Targets:	
CELP Standard 6-8.1 An EL can construct meaning from oral presentations and literary and informational text through grade-appropriate listening, reading and viewing.		I can <ul style="list-style-type: none"> Determine central ideas or themes in oral presentations or written text Explain how the central ideas/themes are developed by supporting ideas or evidence Summarize a text 	
Common Learning Experiences	Learning Target	Success Criteria/ Assessment	Resources
Digital Media Presentation	I can judge the effectiveness of a digital media presentation.	I can evaluate the design principles and techniques	Sample Digital Media Presentations

<p>Rubric Creation</p>		<p>used in a digital media presentation.</p> <p>I can identify the strengths and weaknesses of a digital media presentation.</p> <p>I can establish guidelines for creating effective digital media presentations.</p>	
<p>Digital Media Presentation</p>	<p>I can create an engaging digital media presentation.</p>	<p>I can select a digital media tool to meet my needs.</p> <p>I can plan and organize a digital media presentation.</p> <p>I can use the features of a digital media tool to create a presentation.</p> <p>I can incorporate multimedia elements like images, videos, and audio clips to enhance my presentation.</p> <p>I can follow the best practices for creating an engaging digital media presentation.</p> <p>I can clearly and engagingly present my digital media project to an audience.</p>	<p>Digital Media Tools</p>

Course Title:	Content Area:	Grade Level:	Credit (if applicable)
Grade 7 Library Media	Library Media	7	
Course Description:			
<p>The school library media programs of Bristol Public Schools facilitate opportunities for students and faculty to become lifelong learners who thrive in complex learning environments. Through instructional strategies designed to infuse inquiry and technology as tools for learning, students will develop skills to interpret and develop new understandings, seek diverse perspectives, create new knowledge, and grow as ethical, digital citizens. Through equitable access to reading and information resources, the library media programs promote lifelong reading in a safe environment conducive to learning.</p>			
Aligned Core Resources:		Connection to the <i>BPS Vision of the Graduate</i>	
N/A		<p>Media Literacy</p> <ul style="list-style-type: none"> ● Understand both how and why media messages are constructed, and for what purpose ● Examine how individuals interpret messages differently, how values and points of view are included or excluded, and how media can influence beliefs and behaviors ● Apply a fundamental understanding of the ethical/legal issues surrounding the access and use of media <p>Communications and Technology Literacy</p> <ul style="list-style-type: none"> ● Use digital technology, communication tools, and/or networks to access, manage, integrate, evaluate, and create information in order to function in a knowledge society <p>Information Literacy</p> <ul style="list-style-type: none"> ● Access information on efficiently (time) and effectively (sources) ● Evaluate information critically and competently ● Use information accurately and creatively for the issue or problem at hand ● Manage the flow of information from a wide variety of sources ● Apply a fundamental understanding of the ethical/legal issues surrounding the access and use of information 	
Additional Course Information: <i>Knowledge/Skill Dependent courses/prerequisites</i>		Link to <i>Completed Equity Audit</i>	

Standard Matrix

Standards	Module 1	Module 2	Module 3	Module 4
CT Core Standards				
RI 7.2 Determine two or more central ideas in a text and analyze their development over the course of the text; provide an objective summary of the text.		X		X
W 7.6 Use technology, including the Internet, to produce and publish writing and link to and cite sources as well as to interact and collaborate with others, including linking to and citing sources.				X
W 7.7 Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.		X	X	
W 7.8 Gather relevant information from multiple print and digital sources, using search terms effectively ; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.	X	X		
W 7.9 Draw evidence from informational texts to support analysis, reflection, and research.		X		
SL 7.2 Analyze the main ideas and supporting details presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how the ideas clarify a topic, text, or issue under study.		X		X
American Association of School Librarian Standards (AASL Standards)				

<p>INQUIRE: Build new knowledge by inquiring, thinking critically, identifying problems, and developing strategies for solving problems.</p> <p>I.A.1-2 Think</p> <p>Learners display curiosity and initiative by:</p> <ol style="list-style-type: none"> 1. Formulating questions about a personal interest or a curricular topic. 2. Recalling prior and background knowledge as context for new meaning. <p><i>ISTE</i></p> <p>3. <i>Knowledge Constructor</i></p> <p>3a. <i>Students plan and employ effective research strategies to locate information and other resources for their intellectual or create pursuits.</i></p> <p>3b. <i>Students evaluate the accuracy, perspective, credibility and relevance of information, media, data or other resources.</i></p> <p>3c. <i>Students curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions</i></p>		X	X	
<p>INQUIRE</p> <p>I.B.1 Create</p> <p>Learners engage with new knowledge by following a process that includes:</p> <ol style="list-style-type: none"> 1. Using evidence to investigate questions. <p><i>ISTE</i></p> <p>4. <i>Innovative Designer</i></p> <p>4a. <i>Students select and use digital tools to plan and manage a design process that considers design constraints and calculated risks.</i></p>		X		
<p>INQUIRE</p> <p>I.B.3 Create</p> <p>Learners engage with new knowledge by following a process that includes:</p> <ol style="list-style-type: none"> 3. Generating products that illustrate learning. <p><i>ISTE</i></p> <p>4. <i>Innovative Designer</i></p> <p>4a. <i>Students select and use digital tools to plan and manage a design process that considers design constraints and calculated risks.</i></p>				X
<p>INQUIRE</p> <p>I.C.2-3 Share</p> <p>Learners adapt, communicate and exchange learning products with others in a cycle that includes:</p> <ol style="list-style-type: none"> 2. Providing constructive feedback 3. Acting on feedback to improve 			X	

<p><i>ISTE</i> 1. Empowered Learner <i>1c. Students use technology to seek feedback that informs and improves their practice and to demonstrate their learning in a variety of ways.</i></p>				
<p>INQUIRE I.D.1-4 Grow Learners participate in an ongoing inquiry-based process by: 1. Continually seeking knowledge. 2. Engaging in sustained inquiry. 3. Enacting new understanding through real-world connections. 4. Using reflection to guide informed decisions. <i>ISTE</i> 3. Knowledge Constructor <i>3d. Students build knowledge by actively exploring real-world issues and problems, developing ideas and theories and pursuing answers and solutions.</i></p>			X	
<p>INCLUDE: Demonstrate an understanding of and commitment to inclusiveness and respect for diversity in the learning community. II.A.2 Think Learners contribute a balanced perspective when participating in a learning community by: 2. Adopting a discerning stance toward points of view and opinions expressed in information resources and learning products. <i>ISTE</i> N/A</p>			X	
<p>COLLABORATE: Work effectively with others to broaden perspectives and work toward common goals III.B.1 Create Learners participate in personal, social, and intellectual networks by: 1. Using a variety of communication tools and resources. <i>ISTE</i> 6. Creative Communicator <i>6a. Students chose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.</i> 7. Global Collaborator <i>7b. Students use collaborative technologies to work with others, including peers, experts or community members, to examine issues and problems from multiple viewpoints.</i></p>	X			X

<p>CURATE: Make meaning for oneself and others by collecting, organizing, and sharing resources of personal relevance. IV.A.1-3 Think Learners act on an information need by: 1. Determining the need to gather information. 2. Identifying possible sources of information. 3. Making critical choices about information sources to use. <i>ISTE</i> 3. <i>Knowledge Constructor</i> 3c. <i>Students curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions.</i></p>		X		
<p>CURATE IV.B.1-4 Create Learners gather information appropriate to the task by: 1. Seeking a variety of sources. 2. Collecting information representing diverse perspectives. 3. Systematically questioning and assessing the validity and accuracy of information. 4. Organizing information by priority, topic, or other systematic scheme. <i>ISTE</i> 6. <i>Creative Communicator</i> 6a. <i>Students choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication</i></p>		X		
<p>EXPLORE: Discover and innovate in a growth mindset developed through experience and reflection. V.A.1, 3 Think Learners develop and satisfy personal curiosity by: 1. Reading widely and deeply in multiple formats and write and create for a variety of purposes. 3. Engaging in inquiry-based processes for personal growth. <i>ISTE</i> 6. <i>Creative Communicator</i> 6c. <i>Students communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations.</i></p>		X	X	
<p>EXPLORE V.C.1 Share Learners engage with the learning community by: 1. Expressing curiosity about a topic of personal interest or curricular relevance. <i>ISTE</i> 7. <i>Global Communicator</i></p>		X	X	

<p>7d. Students explore local and global issues and use collaborative technologies to work with others to investigate solutions.</p>				
<p>ENGAGE: Demonstrate safe, legal, and ethical creating and sharing of knowledge products independently while engaging in a community of practice and an interconnected world.</p> <p>VI.A.1-3 Think Learners follow ethical and legal guidelines for gathering and using information by:</p> <ol style="list-style-type: none"> 1. Responsibly applying information, technology, and media to learning. 2. Understanding the ethical use of information, technology, and media. 3. Evaluating information for accuracy, validity, social and cultural context, and appropriateness for need. <p><i>ISTE</i> 2. Digital Citizen 2c. Demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property</p>	X	X		
<p>ENGAGE VI.B.1-2 Create Learners use valid information and reasoned conclusions to make ethical decisions in the creation of knowledge by:</p> <ol style="list-style-type: none"> 1. Ethically using and reproducing others' work. 2. Acknowledging authorship and demonstrating respect for the intellectual property of others. <p><i>ISTE</i> 2. Digital Citizen 2c. Demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property</p>	X			X
<p>ENGAGE VI.C.1-2 Share Learners responsibly, ethically, and legally share new information with a global community by:</p> <ol style="list-style-type: none"> 1. Sharing information resources in accordance with modification, reuse, and remix policies. 2. Disseminating new knowledge through means appropriate for the intended audience. <p><i>ISTE</i> 2. Digital Citizen 2c. Demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property. 6. Creative Communicator</p>	X			X

<i>6d. Students publish or present content that customizes the message and medium for their intended audience.</i>				
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Module Links

[Unit 1: Digital Citizenship](#)

[Unit 2: Information and Media Literacy](#)

[Unit 3: Growth, Inquiry and Curiosity](#)

[Unit 4: Presentation of Information](#)

Module 1:

Unit 1: Digital Citizenship

Relevant Standards: Bold indicates priority

CT Core Standards

W 7.8

Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.

AASL Standard

Inquire - Create

I.B.3

Learners engage with new knowledge by following a process that includes:

3. Generating products that illustrate learning.

ISTE

4. Innovative Designer

4a. Students select and use digital tools to plan and manage a design process that considers design constraints and calculated risks.

AASL Standard

Collaborate - Create

III.B.1

Learners participate in personal, social, and intellectual networks by:

1. Using a variety of communication tools and resources.

ISTE

6. Creative Communicator

6a. Students chose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.

7. Global Collaborator

7b. Students use collaborative technologies to work with others, including peers, experts or community members, to examine issues and problems from multiple viewpoints.

AASL Standard

Engage - Create

VI.B.1-2

Learners use valid information and reasoned conclusions to make ethical decisions in the creation of knowledge by:

1. Ethically using and reproducing others' work.

2. Acknowledging authorship and demonstrating respect for the intellectual property of others.

ISTE

2. Digital Citizen

2c. Demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property

AASL Standard

Engage - Share

VI.C.1-2

Learners responsibly, ethically, and legally share new information with a global community by:

1. Sharing information resources in accordance with modification, reuse, and remix policies.

<p>2. Disseminating new knowledge through means appropriate for the intended audience. ISTE 2. Digital Citizen 2c. Demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property. 6. Creative Communicator 6d. Students publish or present content that customizes the message and medium for their intended audience.</p>	
Essential Question(s):	Enduring Understanding(s):
<ol style="list-style-type: none"> 1. What are the rights and responsibilities of a digital citizen? 2. What are the various types of digital media? 3. How do we use different types of media appropriately and safely? 4. How do I avoid plagiarism by using a standard format of citation to acknowledge the work of others? 5. How can I responsibly and ethically use artificial intelligence (AI) in school? 	<p>Students recognize the rights, responsibilities and opportunities of living, learning and working in an interconnected digital world, and they act and model digital citizenship in ways that are safe, legal and ethical.</p>
Demonstration of Learning:	Pacing for Unit
<p>Students will create a digital citizenship PSA (Brochures, Ads or Posters).</p>	<p>Addressed throughout school year</p>
Family Overview (link below)	Integration of Technology:
<p>Grade 7 Unit 1 Overview</p>	<p><i>Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning</i></p>
Unit-specific Vocabulary:	Aligned Unit Materials, Resources, and Technology (beyond core resources):
<p>Acceptable Use Policy Bibliography Publisher Publisher Print/digital sources Artificial Intelligence Bibliography Communication Creative Commons Digital Dilemmas Ethical/legal use Evaluate Validity Social/cultural</p>	<p>Technology</p>

<p>Accuracy Decision Authorship Respect Quote Paraphrase Plagiarism Citation Modify Reuse Remix Audience</p>	
Opportunities for Interdisciplinary Connections:	Anticipated misconceptions:
<ul style="list-style-type: none"> Any discipline requiring research or shared knowledge learned from sources. Any discipline that requires students to work/collaborate in a digital environment. Social Studies Guaranteed Research Experience Projects (GRE) English Language Arts summative essays. Social Studies Inquiry Design Model Projects (IDMs). 	The URL constitutes a citation
Connections to Prior Units:	Connections to Future Units:
Grade 6 Digital Citizenship Unit	Grade 8 Digital Citizenship Unit
Differentiation through Universal Design for Learning	
UDL Indicator	Teacher Actions:
<p>GUIDELINE 7: Recruiting Interest CHECKPOINT 7.1 Optimize Individual Choice and Autonomy</p> <p>GUIDELINE 6: Executive Functions CHECKPOINT 6.3 Facilitate Managing Information and Resources</p>	<p>Provide learners with as much discretion and autonomy as possible by providing choices in such things as:</p> <ul style="list-style-type: none"> the tools used for information gathering or production the color, design, or graphics of layouts, etc. <p>Provide learners a variety of internal scaffolds and external organizational aids. For example:</p> <ul style="list-style-type: none"> Provide graphic organizers and templates for data collection and organizing information. Provide checklists and guides for note-taking.
Supporting Multilingual/English Learners	
Related CELP standards:	Learning Targets:
<p>CELP Standard 6-8.2 An EL can participate in grade - appropriate oral and</p>	<p>I can</p> <ul style="list-style-type: none"> Participate in extended conversation,

Unit 2:

Unit 2: Information and Media Literacy

Relevant Standards: Bold indicates priority

CT Core Standards

W 7.8

Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.

AASL Standard

Inquire - Think

I.A.1-2

Learners display curiosity and initiative by:

1. Formulating questions about a personal interest or a curricular topic.
2. Recalling prior and background knowledge as context for new meaning.

ISTE

3. Knowledge Constructor

3a. Students plan and employ effective research strategies to locate information and other resources for their intellectual or create pursuits.

3b. Students evaluate the accuracy, perspective, credibility and relevance of information, media, data or other resources. 3c. Students curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions

AASL Standard**Inquire - Create****I.B.1 Create**

Learners engage with new knowledge by following a process that includes:

1. Using evidence to investigate questions.

ISTE

4. Innovative Designer

4a. Students select and use digital tools to plan and manage a design process that considers design constraints and calculated risks.

AASL Standard**Curate - Think****IV.A.1-3**

Learners act on an information need by:

1. Determining the need to gather information.

2. Identifying possible sources of information. 3. Making critical choices about information sources to use.

ISTE

3. Knowledge Constructor

3c. Students curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions.

AASL Standard**Curate - Create****IV.B.1-4**

Learners gather information appropriate to the task by:

1. Seeking a variety of sources.

2. Collecting information representing diverse perspectives.

3. Systematically questioning and assessing the validity and accuracy of information.

4. Organizing information by priority, topic, or other systematic scheme.

ISTE

6. Creative Communicator

6a. Students choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication

AASL Standard**Explore- Think****V.A.1,3**

Learners develop and satisfy personal curiosity by:

1. Reading widely and deeply in multiple formats and write and create for a variety of purposes.

3. Engaging in inquiry-based processes for personal growth.

ISTE

6. Creative Communicator

6c. Students communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations.

AASL Standard**Explore - Share**

V.C.1

Learners engage with the learning community by:

1. Expressing curiosity about a topic of personal interest or curricular relevance.

ISTE

7. Global Communicator

7d. Students explore local and global issues and use collaborative technologies to work with others to investigate solutions.

AASL Standard

Engage - Think

VI.A.1-3

Learners follow ethical and legal guidelines for gathering and using information by:

1. Responsibly applying information, technology, and media to learning.
2. Understanding the ethical use of information, technology, and media.
3. Evaluating information for accuracy, validity, social and cultural context, and appropriateness for need.

ISTE

2. Digital Citizen

2c. Demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property

Essential Question(s):	Enduring Understanding(s):
<ol style="list-style-type: none">1. What are the most effective internet search strategies?2. How can I evaluate search results to refine my searches and select sources?3. How can I focus my research to answer a question?4. How can I gather relevant information from a variety of credible and accurate sources?5. How can I use information from a variety of grade appropriate sources to support claims and answer questions.6. How can I use lateral reading to verify the accuracy of information online?7. What criteria can I use for differentiating fake news from credible news?8. How do I analyze the purpose and motives of diverse media?9. How can artificial intelligence be used responsibly?10. How can artificial intelligence be used to perform an internet search?	Students critically curate a variety of resources using digital tools to construct knowledge, produce creative artifacts and make meaningful learning experiences for themselves and others.
Demonstration of Learning:	Pacing for Unit
Students will create a short research project	Addressed throughout school year
Family Overview (link below)	Integration of Technology:
Grade 7 Unit 2 Overview	Intentionally aligned use of digital tools and resources to support acquisition of content, researching,

organizing and communicating learning.

Unit-specific Vocabulary:

Aligned Unit Materials, Resources, and Technology (beyond core resources):

Accuracy
Artificial Intelligence
Assess
Bias
Collect
Credible
Critical
Curiosity
Determine
Engage
Ethical/legal
Evidence
fabricated content
false context
Hallucinations
Identify
imposter content
Initiative
Investigate
manipulated content
media
Prior/Background knowledge
Priority
Prompt
Question
Recall
Relevance
Research Question
Responsible
Satire
Scheme
Seek
Social/Cultural context
Sources
Systematic
Topic
Validity

Technology

Opportunities for Interdisciplinary Connections:

Anticipated misconceptions:

Any discipline requiring research, or sharing knowledge learned from other sources

Everything on the Internet is true.
I can get all of my information for research from one source.
Copying and pasting is note taking.

Connections to Prior Units:		Connections to Future Units:	
Grade 6 Information and Media Literacy Unit Students will use skills from the Grade 7 Digital Citizenship Unit to use a standard format of citation to avoid plagiarism and acknowledge the work of others.		Grade 8 Information and Media Literacy Unit	
Differentiation through Universal Design for Learning			
UDL Indicator		Teacher Actions:	
GUIDELINE 2: Language & Symbols CHECKPOINT 2.1 Clarify vocabulary and symbols		<ul style="list-style-type: none"> • Pre-teach vocabulary and symbols, especially in ways that promote connection to the learners' experience and prior knowledge • Embed support for vocabulary and symbols within the text (e.g., hyperlinks or footnotes to definitions, explanations, illustrations, previous coverage, translations) 	
Supporting Multilingual/English Learners			
Related CELP standards:		Learning Targets:	
CELP 6-8.5 An EL can conduct research and evaluate and communicate findings to answer questions or solve problems.		I can <ul style="list-style-type: none"> • Conduct short research projects to answer a question • Gather information from multiple print and digital sources • Use search terms effectively • Evaluate the credibility of each source • Quote or paraphrase the data and conclusions of others using charts, diagrams, or other graphics, as appropriate • Integrate information into an organized oral or written report • Cite sources • Use a standard format for citations 	
Common Learning Experiences	Learning Target	Success Criteria/ Assessment	Resources
Using Google Advanced Search	I can use search strategies to conduct effective internet searches.	I can use Google advanced search.	Google Search Engine Google Productivity Suite
Search Engine Vs. Database	I can use search strategies to conduct effective internet searches.	I can compare and contrast the advantages and	Google Productivity Suite Search Engine

Tale of the Tape Comparison		disadvantages of search engines and databases.	Databases
T.R.A.A.P. Activity	I can evaluate search results to refine my searches and select sources.	<p>I can determine the timeliness of a website.</p> <p>I can determine the relevance of a website.</p> <p>I can determine the authority of a website.</p> <p>I can determine the accuracy of a website</p> <p>I can determine the purpose of a website.</p>	<p>Search Engines</p> <p>Google Productivity Suite</p> <p>T.R.A.A.P. Graphic Organizer</p>
Lateral Reading Activity	I can evaluate search results to refine my searches and select sources.	I can evaluate the credibility of a website by using multiple websites.	<p>Preselected Websites</p> <p>Graphic Organizer</p>
<p>Creating Research Questions Activity</p> <p>Question Mapping Activity</p>	How can I focus my research to answer a question?	<p>I can create a concept map.</p> <p>I can use a concept map to write a research question.</p>	<p>Google Productivity Suite</p> <p>Graphic Organizers</p>
Cornell Note Taking Activity	<p>I can gather relevant information from a variety of credible and accurate sources.</p> <p>I can use information from a variety of sources to support claims and answer questions.</p>	<p>I can take notes.</p> <p>I can paraphrase.</p> <p>I can gather relevant information from a variety of credible and accurate sources.</p> <p>I can use information from a variety of sources to support claims and answer questions.</p>	<p>Google Productivity Suite</p> <p>Preselected Websites</p>
Fake News Creation Activity	<p>I can define the different types of fake news.</p> <p>I can identify fake news.</p>	I can write fake news stories for each type of fake news.	<p>Fake News Creation Criteria Checklist</p> <p>Google Productivity Suite</p> <p>Graphic Organizers</p>

Advertisement Analysis Activity	I can analyze the purpose and motives behind advertisements by examining persuasive techniques and underlying messages.	I can point out at least 3 persuasive techniques used in an advertisement. I can describe the target audience and main message/purpose of an advertisement.	Advertisements from Different Mediums
AI Prompt Craft Activity	I can use an AI assistant to find relevant information and answer research questions. I can recognize the limitations of ai output.	I can identify the essential elements of a well-crafted AI prompt (C.R.A.F.T.). I can use the C.R.A.F.T graphic organizer to create effective ai prompts. I can create a digital poster to show at least three problems associated with AI assistants.	AI Assistances (Gemini, Perplexity, Chatgpt etc....)

Unit 3:

Growth (Curiosity and Discovery)

Relevant Standards: Bold indicates priority

CT Core Standard

W 7.7

Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.

AASL Standard

Inquire - Think

I.A.1-2

Learners display curiosity and initiative by:

1. Formulating questions about a personal interest or a curricular topic.
2. Recalling prior and background knowledge as context for new meaning.

ISTE

3. Knowledge Constructor

3a. Students plan and employ effective research strategies to locate information and other resources for their intellectual or create pursuits.

3b. Students evaluate the accuracy, perspective, credibility and relevance of information, media, data or other resources. 3c. Students curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions

AASL Standard

Inquire - Grow

I.D.1-4

Learners participate in an ongoing inquiry-based process by:

1. Continually seeking knowledge.
2. Engaging in sustained inquiry.
3. Enacting new understanding through real-world connections.
4. Using reflection to guide informed decisions.

ISTE

3. Knowledge Constructor

3d. Students build knowledge by actively exploring real-world issues and problems, developing ideas and theories and pursuing answers and solutions.

AASL Standard**Include -Think**

II.A.2

Learners contribute a balanced perspective when participating in a learning community by:

2. Adopting a discerning stance toward points of view and opinions expressed in information resources and learning products.

AASL Standard**Explore -Think**

V.A.1,3 Think

Learners develop and satisfy personal curiosity by:

1. Reading widely and deeply in multiple formats and write and create for a variety of purposes.
3. Engaging in inquiry-based processes for personal growth.

ISTE

6. Creative Communicator

6c. Students communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations.

Essential Question(s):	Enduring Understanding(s):
<ol style="list-style-type: none"> 1. How do I use curiosity from past experiences to discover new learning? 2. How do I refocus my inquiry by generating additional, related, focused questions? 3. How do I develop and communicate my own perspective? 4. How can I grow as a reader by reading widely and deeply in multiple formats? 	Discover and innovate in a growth mindset developed through experience and reflection.
Demonstration of Learning:	Pacing for Unit
Students will create a book review for a library book	Addressed throughout school year
Family Overview (link below)	Integration of Technology:
Grade 7 Unit 3 Overview	<i>Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning</i>
Unit-specific Vocabulary:	Aligned Unit Materials, Resources, and Technology (beyond core resources):

Curiosity Prior knowledge New meaning Seek Inquiry Connections Decisions Perspective Stance Point of view Opinion	Technology
Opportunities for Interdisciplinary Connections:	Anticipated misconceptions:
Any discipline requiring research, or sharing knowledge learned from other sources	There is always a right answer (or one answer) to a question It's wrong to question/challenge another person's perspective The teacher is always right
Connections to Prior Units:	Connections to Future Units:
Grade 6 Growth (Curiosity And Discovery) Unit Students will use skills from the Grade 7 Digital Citizenship Unit to use a standard format of citation to avoid plagiarism and acknowledge the work of others. Students will use skills from the Grade 7 Information and Media Literacy Unit to effectively locate and use information from the internet.	Grade 8 Growth (Curiosity And Discovery) Unit
Differentiation through Universal Design for Learning	
UDL Indicator	Teacher Actions:
GUIDELINE 9 Provide options for Self Regulation CHECKPOINT 9.1 Promote expectations and beliefs that optimize motivation	Multiple options need to be given to learners to help them stay motivated. <ul style="list-style-type: none"> ● Provide prompts, reminders, guides, rubrics, checklists that focus on: <ul style="list-style-type: none"> ○ Elevating the frequency of self-reflection and self-reinforcements ● Support activities that encourage self-reflection and identification of personal goals
Supporting Multilingual/English Learners	
Related CELP standards:	Learning Targets:
CELP Standard 6-8.2 An EL can participate in grade - appropriate oral and written exchanges of information, ideas, and analyses,	I can <ul style="list-style-type: none"> ● Participate in extended conversation, discussions, and written exchanges about a

<p>responding to peer, audience, or reader comments and questions.</p>		<p>variety of topics , texts, and issues using academic and domain specific vocabulary.</p> <ul style="list-style-type: none"> ● Build on ideas of others ● Express ideas clearly ● Pose and respond to relevant questions ● Add relevant and specific evidence ● Summarize the key ideas ● Reflect on the key ideas expressed 	
Common Learning Experiences	Learning Target	Success Criteria/ Assessment	Resources
<p>Student-led Book Talks (Public Speaking Book Promotion)</p>	<p>I can evaluate the strengths and weaknesses of a book and provide evidence to support my opinions.</p> <p>I can effectively communicate my ideas, opinions, and recommendations about a book.</p>	<p>I can summarize main plot points, characters, themes, author's writing style, character development, and use of literary devices.</p> <p>I can incorporate multimedia components like images, video clips, or props to enhance my presentation.</p> <p>I can respond to audience questions about the book.</p>	<p>Book Talk Menu</p> <p>Book Talk Guidelines</p> <p>Viewer Scoring Rubric</p> <p>Destiny Discover Online Library Catalog</p> <p>Google Productivity Suite Digital Media</p> <p>Communication Platforms</p>
<p>Student Choice Personal Interest Research Project</p>	<p>I can explore my interests in depth.</p> <p>I can communicate my own perspective.</p>	<p>I can use research skills to discover new topics, resources, or opportunities related to my passions.</p> <p>I can use research skills to communicate my ideas.</p>	<p>Google Productivity Suite</p> <p>Search Engines</p> <p>Databases</p> <p>Digital Communication Platforms</p>
<p>Book Check Out Process</p>	<p>I can select, locate and check out library books based on interests.</p>	<p>I can access and use the library's online catalogs to find suitable reading materials.</p> <p>I can navigate the library's organization system and locate books in different sections or collections.</p>	<p>Destiny Discover</p>
<p>Book Advertisement Project (Digital Book Promotion)</p>	<p>I can grow as a reader.</p>	<p>I can set reading goals.</p> <p>I can allocate a specific amount of time for reading.</p> <p>I can use the library online catalog to locate books</p>	<p>Destiny Discover Online Library Catalog</p> <p>Google Productivity Suite Digital Media</p> <p>Communication Platforms</p>

		that meet my personal interests. I can create an advertisement for a book that interests me.	
Independent Reading Participating in Library Reading Programs	I can read grade-level texts with deep understanding over an extended period of time.	I can maintain my focus and concentration while reading for an extended time without becoming distracted.	Library Books

Unit 4:

Unit 4: Show (Presentation of Information)

Relevant Standards: **Bold indicates priority**

CT Core Standards

RI 7.2

Determine two or more central ideas in a text and analyze their development over the course of the text; provide an objective summary of the text.

W 7.6

Use technology, including the Internet, to produce and publish writing and link to and cite sources as well as to interact and collaborate with others, including linking to and citing sources.

SL 7.2

Analyze the main ideas and supporting details presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how the ideas clarify a topic, text, or issue under study.

AASL Standard

Inquire - Create

I.B.3

Learners engage with new knowledge by following a process that includes:

3. Generating products that illustrate learning.

ISTE

4. Innovative Designer

4a. Students select and use digital tools to plan and manage a design process that considers design constraints and calculated risks.

AASL Standard

Collaborate - Create

III.B.1

Learners participate in personal, social, and intellectual networks by:

1. Using a variety of communication tools and resources.

ISTE

6. Creative Communicator

6a. Students chose the appropriate platforms and tools for meeting the desired objectives of their creation or

communication.

7. Global Collaborator

7b. Students use collaborative technologies to work with others, including peers, experts or community members, to examine issues and problems from multiple viewpoints.

AASL Standard

Engage - Create

VI.B.1-2

Learners use valid information and reasoned conclusions to make ethical decisions in the creation of knowledge by:

1. Ethically using and reproducing others' work.

2. Acknowledging authorship and demonstrating respect for the intellectual property of others.

ISTE

2. Digital Citizen

2c. Demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property

AASL Standard

Engage - Share

VI.C.1-2

Learners responsibly, ethically, and legally share new information with a global community by:

1. Sharing information resources in accordance with modification, reuse, and remix policies.

2. Disseminating new knowledge through means appropriate for the intended audience.

ISTE

2. Digital Citizen

2c. Demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property.

6. Creative Communicator

6d. Students publish or present content that customizes the message and medium for their intended audience.

Essential Question(s):	Enduring Understanding(s):
1. How do I communicate what I have learned? 2. How can I use digital media to communicate with an authentic audience? 3. How do I give credit to other people's work by linking and citing sources in my presentation?	Students communicate clearly and express themselves creatively for a variety of purposes using the platforms, tools, styles, formats and digital media appropriate to their goals.
Demonstration of Learning:	Pacing for Unit
Students will create a digital media presentation.	Addressed throughout school year
Family Overview (link below)	Integration of Technology:
Grade 7 Unit 4 Overview	<i>Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning</i>
Unit-specific Vocabulary:	Aligned Unit Materials, Resources, and Technology (beyond core resources):
Intellectual networks Communication	Technology

Valid Ethical Authorship Intellectual property Global community Reuse Remix Disseminating	
Opportunities for Interdisciplinary Connections:	Anticipated misconceptions:
Any discipline requiring research, or sharing knowledge learned from other sources	You don't have to cite a picture "Google" is the citation for a picture I can use music if I can find it Google is where I get all my information
Connections to Prior Units:	Connections to Future Units:
Grade 6 Show (Presentation Of Information) Unit Students will use skills from the Grade 7 Digital Citizenship Unit to use a standard format of citation to avoid plagiarism and acknowledge the work of others. Students will use skills from the Grade 7 Information and Media Literacy Unit to effectively locate and use information from the internet.	Grade 6 Show (Presentation Of Information) Unit
Differentiation through Universal Design for Learning	
UDL Indicator	Teacher Actions:
GUIDELINE 3 Provide options for Comprehension CHECKPOINT 3.4 Maximize transfer and generalization	Supports for memory, generalization, and transfer include techniques that are designed to heighten the memorability of the information, as well as those that prompt and guide learners to employ explicit strategies. <ul style="list-style-type: none"> • Provide checklists, organizers, sticky notes, electronic rem-inders • Prompt the use of mnemonic strategies and devices (e.g., visual imagery, paraphrasing strategies, method of loci, etc.) • Incorporate explicit opportunities for review and practice • Provide templates, graphic organizers, concept maps to support note-taking • Provide scaffolds that connect new information to prior knowledge (e.g., word webs, half-full concept maps) • Embed new ideas in familiar ideas and contexts (e.g., use of analogy, metaphor, drama, music, film, etc.) • Offer opportunities over time to revisit key ideas and linkages between ideas

Supporting Multilingual/English Learners			
Related <i>CELP standards:</i>		Learning Targets:	
CELP Standard 6-8.1 An EL can construct meaning from oral presentations and literary and informational text through grade-appropriate listening, reading and viewing.		I can <ul style="list-style-type: none"> - Determine central ideas or themes in oral presentations or written text - Explain how the central ideas/themes are developed by supporting ideas or evidence - Summarize a text 	
Common Learning Experiences	Learning Target	Success Criteria/ Assessment	Resources
Digital Presentation Evaluation and Revision	I can revise a digital media presentation to make it more effective.	I can evaluate the design principles and techniques used in a digital media presentation. I can use established guidelines to redesign a digital media presentation.	Ineffective Digital Media Presentation
Digital Media Presentation	I can create an engaging digital media presentation.	I can select a digital media tool to meet my needs. I can plan and organize a digital media presentation. I can use the features of a digital media tool to create a presentation. I can incorporate multimedia elements like images, videos, and audio clips to enhance my presentation. I can follow the best practices for creating an engaging digital media presentation. I can clearly and engagingly present my digital media project to an audience.	Digital Media Tools

Course Title:	Content Area:	Grade Level:	Credit (if applicable)
Grade 8 Library Media	Library Media	8	NA
Course Description:			
<p>The school library media programs of Bristol Public Schools facilitate opportunities for students and faculty to become lifelong learners who thrive in complex learning environments. Through instructional strategies designed to infuse inquiry and technology as tools for learning, students will develop skills to interpret and develop new understandings, seek diverse perspectives, create new knowledge, and grow as ethical, digital citizens. Through equitable access to reading and information resources, the library media programs promote lifelong reading in a safe environment conducive to learning.</p>			
Aligned Core Resources:		Connection to the <i>BPS Vision of the Graduate</i>	
<p>NA</p>		<p>Media Literacy</p> <ul style="list-style-type: none"> ● Understand both how and why media messages are constructed, and for what purpose ● Examine how individuals interpret messages differently, how values and points of view are included or excluded, and how media can influence beliefs and behaviors ● Apply a fundamental understanding of the ethical/legal issues surrounding the access and use of media <p>Communications and Technology Literacy</p> <ul style="list-style-type: none"> ● Use digital technology, communication tools, and/or networks to access, manage, integrate, evaluate, and create information in order to function in a knowledge society <p>Information Literacy</p> <ul style="list-style-type: none"> ● Access information on efficiently (time) and effectively (sources) ● Evaluate information critically and competently ● Use information accurately and creatively for the issue or problem at hand ● Manage the flow of information from a wide variety of sources ● Apply a fundamental understanding of the ethical/legal issues surrounding the access and use of information <p>Communication</p> <ul style="list-style-type: none"> ● Articulates thoughts and ideas effectively using oral, written and nonverbal communication skills in a variety of forms and contexts ● Listen effectively to decipher meaning, including knowledge, values, attitudes and 	

	<p>intentions. Use communication for a range of purposes (e.g. to inform, instruct, motivate and persuade)</p> <ul style="list-style-type: none"> • Utilize multiple media and technologies, and know how to judge their effectiveness as well as assess their impact • Communicate effectively in diverse environments (including becoming multilingual)
Additional Course Information: <i>Knowledge/Skill Dependent courses/prerequisites</i>	Link to Completed Equity Audit
N/A	Library Media Curriculum Audit

Standard Matrix

Standards	Unit 1	Unit 2	Unit 3	Unit 4
CT Core Standards				
RI 8.2 Determine a central idea of a text and analyze its development over the course of the text, including its relationship to supporting ideas; provide an objective summary of the text.		X		X
W 8.6 Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas efficiently as well as to interact and collaborate with others.				X
W 8.7 Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.		X	X	
W 8.8 Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.	X	X		
W 8.9 Draw evidence from informational texts to support analysis, reflection, and research.		X		
SL 8.2 Analyze the purpose of information presented in diverse media and formats (e.g., visually, quantitatively, orally) and evaluate the motives (e.g., social, commercial, political) behind its presentation.		X		X

American Association of School Librarian Standards (AASL)

Inquire
Build new knowledge by inquiring, thinking critically, identifying problems, and developing strategies for

solving problems.				
<p>Build new knowledge by inquiring, thinking critically, identifying problems, and developing strategies for solving problems.</p> <p>I.A.1-2 Think</p> <p>Learners display curiosity and initiative by:</p> <ol style="list-style-type: none"> 1. Formulating questions about a personal interest or a curricular topic. 2. Recalling prior and background knowledge as context for new meaning. <p>ISTE</p> <p>3. Knowledge Constructor</p> <p>3a. Students plan and employ effective research strategies to locate information and other resources for their intellectual or create pursuits.</p> <p>3b. Students evaluate the accuracy, perspective, credibility and relevance of information, media, data or other resources. 3c. Students curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions</p>		X	X	
<p>I.B.1 Create</p> <p>Learners engage with new knowledge by following a process that includes:</p> <ol style="list-style-type: none"> 1. Using evidence to investigate questions. <p>ISTE</p> <p>4. Innovative Designer</p> <p>4a. Students select and use digital tools to plan and manage a design process that considers design constraints and calculated risks.</p>		X		
<p>I.B.3 Create</p> <p>Learners engage with new knowledge by following a process that includes:</p> <ol style="list-style-type: none"> 3. Generating products that illustrate learning. <p>ISTE</p> <p>4. Innovative Designer</p> <p>4a. Students select and use digital tools to plan and manage a design process that considers design constraints and calculated risks.</p>				X
<p>I.C.2-3 Share</p> <p>Learners adapt, communicate and exchange learning products with others in a cycle that includes:</p> <ol style="list-style-type: none"> 2. Providing constructive feedback 3. Acting on feedback to improve <p>ISTE</p> <p>1. Empowered Learner</p> <p>1c. Students use technology to seek feedback that informs and improves their practice and to demonstrate their learning in a variety of ways.</p>			X	
<p>I.D.1-4 Grow</p> <p>Learners participate in an ongoing inquiry-based process by:</p> <ol style="list-style-type: none"> 1. Continually seeking knowledge. 2. Engaging in sustained inquiry. 3. Enacting new understanding through real-world connections. 4. Using reflection to guide informed decisions. <p>ISTE</p> <p>3. Knowledge Constructor</p> <p>3d. Students build knowledge by actively exploring real-world issues and problems, developing ideas and theories and pursuing answers and solutions.</p>			X	

Include Demonstrate an understanding of and commitment to inclusiveness and respect for diversity in the learning community.				
II.A.2 Think Learners contribute a balanced perspective when participating in a learning community by: 2. Adopting a discerning stance toward points of view and opinions expressed in information resources and learning products. ISTE N/A			X	
Collaborate Work effectively with others to broaden perspectives and work toward common goals				
III.B.1 Create Learners participate in personal, social, and intellectual networks by: 1. Using a variety of communication tools and resources. ISTE 6. Creative Communicator 6a. Students chose the appropriate platforms and tools for meeting the desired objectives of their creation or communication. 7. Global Collaborator 7b. Students use collaborative technologies to work with others, including peers, experts or community members, to examine issues and problems from multiple viewpoints.	X			X
CURATE Make meaning for oneself and others by collecting, organizing, and sharing resources of personal relevance.				
IV.A.1-3 Think Learners act on an information need by: 1. Determining the need to gather information. 2. Identifying possible sources of information. 3. Making critical choices about information sources to use. ISTE 3. Knowledge Constructor 3c. Students curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions.		X		
IV.B.1-4 Create Learners gather information appropriate to the task by: 1. Seeking a variety of sources. 2. Collecting information representing diverse perspectives. 3. Systematically questioning and assessing the validity and accuracy of information. 4. Organizing information by priority, topic, or other systematic scheme. ISTE 6. Creative Communicator 6a. Students choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication		X		
EXPLORE Discover and innovate in a growth mindset developed through experience and reflection.				

<p>V.A.1,3 Think Learners develop and satisfy personal curiosity by: 1. Reading widely and deeply in multiple formats and write and create for a variety of purposes. 3. Engaging in inquiry-based processes for personal growth. ISTE 6. Creative Communicator 6c. Students communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations.</p>		X	X	
<p>V.C.1 Share Learners engage with the learning community by: 1. Expressing curiosity about a topic of personal interest or curricular relevance. ISTE 7. Global Communicator 7d. Students explore local and global issues and use collaborative technologies to work with others to investigate solutions.</p>		X	X	
<p>ENGAGE Demonstrate safe, legal, and ethical creating and sharing of knowledge products independently while engaging in a community of practice and an interconnected world.</p>				
<p>VI.A.1-3 Think Learners follow ethical and legal guidelines for gathering and using information by: 1. Responsibly applying information, technology, and media to learning. 2. Understanding the ethical use of information, technology, and media. 3. Evaluating information for accuracy, validity, social and cultural context, and appropriateness for need. ISTE 2. Digital Citizen 2c. Demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property</p>	X	X		
<p>VI.B.1-2 Create Learners use valid information and reasoned conclusions to make ethical decisions in the creation of knowledge by: 1. Ethically using and reproducing others' work. 2. Acknowledging authorship and demonstrating respect for the intellectual property of others. ISTE 2. Digital Citizen 2c. Demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property</p>	X			X
<p>VI.C.1-2 Share Learners responsibly, ethically, and legally share new information with a global community by: 1. Sharing information resources in accordance with modification, reuse, and remix policies. 2. Disseminating new knowledge through means appropriate for the intended audience. ISTE</p>	X			X

2. Digital Citizen 2c. Demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property. 6. Creative Communicator 6d. Students publish or present content that customizes the message and medium for their intended audience.				
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Unit Links

If unit headings are formatted as a heading, then we can link a Table of Contents to better organize and provide faster access to each unit

[Unit 1: Digital Citizenship](#)

[Unit 2: Inquiry \(Research\)](#)

[Unit 3: Growth \(Curiosity And Discovery\)](#)

[Unit 4: Show \(Presentation Of Information\)](#)

Unit Title:

Unit 1: Digital Citizenship

Relevant Standards: Bold indicates priority

CT Core Standard

W 8.8

Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.

AASL Standard

Collaborate - Create

III.B.1

Learners participate in personal, social, and intellectual networks by:

1. Using a variety of communication tools and resources.

ISTE

6. Creative Communicator

6a. Students chose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.

7. Global Collaborator

7b. Students use collaborative technologies to work with others, including peers, experts or community members, to examine issues and problems from multiple viewpoints.

AASL Standard

Engage - Think

VI.A.1-3

Learners follow ethical and legal guidelines for gathering and using information by:

1. Responsibly applying information, technology, and media to learning.
2. Understanding the ethical use of information, technology, and media.
3. Evaluating information for accuracy, validity, social and cultural context, and appropriateness for need.

ISTE

2. Digital Citizen

2c. Demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property

AASL Standard

Engage - Create

VI.B.1-2

Learners use valid information and reasoned conclusions to make ethical decisions in the creation of knowledge by:

1. Ethically using and reproducing others' work.
2. Acknowledging authorship and demonstrating respect for the intellectual property of others.

ISTE

2. Digital Citizen

2c. Demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property

AASL Standard

Engage - Share

VI.C.1-2

Learners responsibly, ethically, and legally share new information with a global community by:

1. Sharing information resources in accordance with modification, reuse, and remix policies.
2. Disseminating new knowledge through means appropriate for the intended audience.

ISTE

2. Digital Citizen
- 2c. Demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property.
6. Creative Communicator
- 6d. Students publish or present content that customizes the message and medium for their intended audience.

Essential Question(s):	Enduring Understanding(s):																														
<ol style="list-style-type: none"> 1. What are the rights and responsibilities of a digital citizen? 2. What are the various types of digital media? 3. How do we use different types of media appropriately and safely? 4. How do I avoid plagiarism by using a standard format of citation to acknowledge the work of others? 5. How can I responsibly and ethically use artificial intelligence (AI) in school? 	<p>Students recognize the rights, responsibilities and opportunities of living, learning and working in an interconnected digital world, and they act and model digital citizenship in ways that are safe, legal and ethical.</p>																														
Demonstration of Learning:	Pacing for Unit																														
<p>Students will create a digital citizenship PSA (Brochures, Ads or Posters).</p>	<p>addressed throughout the year</p>																														
Family Overview (link below)	Integration of Technology:																														
<p>Family Overview</p>	<p>Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning.</p>																														
Unit-specific Vocabulary:	Aligned Unit Materials, Resources, and Technology (beyond core resources):																														
<table border="0"> <tr> <td>Accuracy</td> <td>Fact Checking Sites</td> </tr> <tr> <td>Acceptable Use Policy</td> <td>Modify</td> </tr> <tr> <td>Artificial Intelligence</td> <td>Paraphrase</td> </tr> <tr> <td>Attribution</td> <td>Plagiarism</td> </tr> <tr> <td>Audience</td> <td>Print/digital sources</td> </tr> <tr> <td>Authorship</td> <td>Public Domain</td> </tr> <tr> <td>Bibliography</td> <td>Publisher</td> </tr> <tr> <td>Citation</td> <td>Quote</td> </tr> <tr> <td>Communication</td> <td>Remix</td> </tr> <tr> <td>Copyright</td> <td>Reproduce</td> </tr> <tr> <td>Creative Commons</td> <td>Respect</td> </tr> <tr> <td>Decision</td> <td>Reuse</td> </tr> <tr> <td>Digital Dilemmas</td> <td>Validity</td> </tr> <tr> <td>Ethical/legal use</td> <td>Works Cited</td> </tr> <tr> <td>Evaluate</td> <td></td> </tr> </table>	Accuracy	Fact Checking Sites	Acceptable Use Policy	Modify	Artificial Intelligence	Paraphrase	Attribution	Plagiarism	Audience	Print/digital sources	Authorship	Public Domain	Bibliography	Publisher	Citation	Quote	Communication	Remix	Copyright	Reproduce	Creative Commons	Respect	Decision	Reuse	Digital Dilemmas	Validity	Ethical/legal use	Works Cited	Evaluate		<p>Technology</p>
Accuracy	Fact Checking Sites																														
Acceptable Use Policy	Modify																														
Artificial Intelligence	Paraphrase																														
Attribution	Plagiarism																														
Audience	Print/digital sources																														
Authorship	Public Domain																														
Bibliography	Publisher																														
Citation	Quote																														
Communication	Remix																														
Copyright	Reproduce																														
Creative Commons	Respect																														
Decision	Reuse																														
Digital Dilemmas	Validity																														
Ethical/legal use	Works Cited																														
Evaluate																															
Opportunities for Interdisciplinary Connections:	Anticipated misconceptions:																														

<ul style="list-style-type: none"> • Any discipline requiring research or shared knowledge learned from sources. • Any discipline that requires students to work/collaborate in a digital environment. • Social Studies Guaranteed Research Experience Projects (GRE) • English Language Arts summative essays. • Social Studies Inquiry Design Model Projects (IDMs). 	<ul style="list-style-type: none"> • Students are already tech-savvy enough to safely navigate a digital world. • A URL constitutes a citation. • Images do not need attribution. • Everything on the internet is free to use. • Short lessons on digital citizenship are enough for students to learn how to safely navigate a digital world. • Students that understand computer science are good digital citizens. • Privacy settings can fully protect students while they are living in a digital world. • Student actions in the digital world are not permanent. • Students cannot responsibly and ethically use artificial intelligence (AI) in school. • Artificial Intelligence (AI) is foolproof and infallible.
Connections to Prior Units:	Connections to Future Units:
<ul style="list-style-type: none"> • Grade 7 Digital Citizenship Unit 	<ul style="list-style-type: none"> • Grade 9 Digital Citizenship Unit
Differentiation through <i>Universal Design for Learning</i>	
UDL Indicator	Teacher Actions:
<p>GUIDELINE 7: Recruiting Interest CHECKPOINT 7.1 Optimize Individual Choice and Autonomy</p> <p>GUIDELINE 6: Executive Functions CHECKPOINT 6.3 Facilitate Managing Information and Resources</p>	<p>Provide learners with as much discretion and autonomy as possible by providing choices in such things as:</p> <ul style="list-style-type: none"> • the tools used for information gathering or production • the color, design, or graphics of layouts, etc. <p>Provide learners a variety of internal scaffolds and external organizational aids. For example:</p> <ul style="list-style-type: none"> • Provide graphic organizers and templates for data collection and organizing information. • Provide checklists and guides for note-taking.
Supporting Multilingual/English Learners	
Related <i>CELP standards:</i>	Learning Targets:
<p>CELP Standard 6-8.2 An EL can participate in grade - appropriate oral and written exchanges of information, ideas, and analyses, responding to peer, audience, or reader comments and questions.</p>	<p>I can...</p> <ul style="list-style-type: none"> • participate in extended conversations, discussions, and written exchanges about a variety of topics, texts, and issues using academic and domain specific vocabulary. • build on ideas of others. • express ideas clearly. • pose and respond to relevant questions. • add relevant and specific evidence. • summarize the key ideas.

Common Learning Experiences	Learning Target	Success Criteria/ Assessment	Resources
<p>Work in a group to create a set of norms for digital collaboration.</p> <p>Use a digital platform to collaborate in real time and present the digital citizenship norms.</p>	<p>I can appropriately and safely use digital tools to collaborate with others.</p>	<p>I can select a digital platform to meet my collaboration requirements.</p> <p>I can follow a set of guidelines while collaborating with peers in a digital environment.</p> <p>I can use the collaborative features of a digital platform.</p>	<p>Google Productivity Suite Flipgrid Padlet Pear Deck Canva</p>
<p>Create a ratings guide for various collaborative platforms.</p>	<p>I can use various types of digital media.</p>	<p>I can identify the features of various types of digital media.</p> <p>I can identify the pros and cons of various types of digital media.</p>	<p>Google Productivity Suite Flipgrid Padlet Pear Deck Canva</p>
<p>Social Studies Guaranteed Research Experience (GRE)</p> <p>Social Studies Inquiry Design Model Projects (IDMs)</p> <p>English Language Art Summative Essay</p>	<p>I can use a standard format of citation to acknowledge the work of others.</p>	<p>I can use Google to create a citation.</p> <p>I can use Google to create and insert an in-text citation.</p> <p>I can use Google to create a works cited page.</p> <p>I can format an essay using MLA style.</p>	<p>Google Productivity Suite</p> <p>Google Citation and Works Cited Generator</p> <p>Noodle Tools</p>
<p>Creative Commons Digital Art Project</p>	<p>I can understand the benefits of using Creative Commons for sharing creative works.</p>	<p>I can use a digital tool to build a creative work.</p> <p>I can select a Creative Commons license and apply it to my creative work.</p>	<p>Canva</p>
<p>Digital Citizenship PSA Project</p> <p>Format - Presentations, Infographics, Electronic Posters, Screencast, Podcast, Website etc...</p>	<p>I can select and use an appropriate digital platform to present content to my audience.</p>	<p>I can teach others about the rights and responsibilities of a digital citizen.</p> <p>I can include appropriate citations in my final product.</p> <p>I can use the features of a</p>	<p>Google Productivity Suite Flipgrid Padlet Pear Deck Canva</p>

Topics - Media Balance & Well-Being, Privacy & Security, Cyberbullying, Digital Drama, Digital Footprint & Identity, Relationships & Communication etc...		digital platform.	
Digital Dilemmas Activity	I can analyze a digital dilemma scenario and apply my understanding of digital citizenship and online safety to recommend an appropriate course of action.	<p>I can Identify the key issues and ethical considerations present in the digital dilemma scenario.</p> <p>I can demonstrate knowledge of digital citizenship principles like online privacy, cyberbullying, digital footprints, etc.</p> <p>I can explain the potential risks and consequences associated with different choices</p> <p>I can propose a solution that upholds ethical online behavior and internet safety practices.</p> <p>I can justify their recommended approach using logical reasoning and evidence.</p>	<p>Digital Dilemma Cards</p> <p>Google Productivity Suite</p>

Unit Title:

Unit 2: Information and Media Literacy

Relevant Standards: Bold indicates priority

CT Core Standards

RI 8.2

Determine a central idea of a text and **analyze** its development over the course of the text, including its relationship to supporting ideas; provide an objective summary of the text.

W 8.7

Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.

W 8.8

Gather relevant information from multiple print and digital sources, using search terms effectively; assess the

credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.

W 8.9

Draw evidence from informational texts to support analysis, reflection, and research.

SL 8.2

Analyze the purpose of information presented in diverse media and formats (e.g., visually, quantitatively, orally) and evaluate the motives (e.g., social, commercial, political) behind its presentation.

AASL Standard

Inquire - Think

I.A.1-2

Learners display curiosity and initiative by:

1. Formulating questions about a personal interest or a curricular topic.
2. Recalling prior and background knowledge as context for new meaning.

ISTE

3. Knowledge Constructor

3a. Students plan and employ effective research strategies to locate information and other resources for their intellectual or create pursuits.

3b. Students evaluate the accuracy, perspective, credibility and relevance of information, media, data or other resources. 3c. Students curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions

AASL Standard

Inquire - Create

I.B.1 Create

Learners engage with new knowledge by following a process that includes:

1. Using evidence to investigate questions.

ISTE

4. Innovative Designer

4a. Students select and use digital tools to plan and manage a design process that considers design constraints and calculated risks.

AASL Standard

Curate - Think

IV.A.1-3

Learners act on an information need by:

1. Determining the need to gather information.
2. Identifying possible sources of information. 3. Making critical choices about information sources to use.

ISTE

3. Knowledge Constructor

3c. Students curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions.

AASL Standard

Curate - Create

IV.B.1-4

Learners gather information appropriate to the task by:

1. Seeking a variety of sources.
2. Collecting information representing diverse perspectives.
3. Systematically questioning and assessing the validity and accuracy of information.
4. Organizing information by priority, topic, or other systematic scheme.

ISTE

6. Creative Communicator

6a. Students choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication

AASL Standard**Explore- Think****V.A.1,3**

Learners develop and satisfy personal curiosity by:

1. Reading widely and deeply in multiple formats and write and create for a variety of purposes.
3. Engaging in inquiry-based processes for personal growth.

ISTE

6. Creative Communicator

6c. Students communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations.

AASL Standard**Explore - Share****V.C.1**

Learners engage with the learning community by:

1. Expressing curiosity about a topic of personal interest or curricular relevance.

ISTE

7. Global Communicator

7d. Students explore local and global issues and use collaborative technologies to work with others to investigate solutions.

AASL Standard**Engage - Think****VI.A.1-3**

Learners follow ethical and legal guidelines for gathering and using information by:

1. Responsibly applying information, technology, and media to learning.
2. Understanding the ethical use of information, technology, and media.
3. Evaluating information for accuracy, validity, social and cultural context, and appropriateness for need.

ISTE

2. Digital Citizen

2c. Demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property

Essential Question(s):

1. What are the most effective internet search strategies?
2. How can I evaluate search results to refine my searches and select sources?
3. How can I focus my research to answer a question?
4. How can I gather relevant information from a variety of credible and accurate sources?
5. How can I use information from a variety of sources to support claims and answer questions?
6. How can I use lateral reading to verify the accuracy of information online?
7. What criteria can I use for differentiating fake news from credible news?
8. How do I analyze the purpose and motives of diverse media?
9. How can artificial intelligence be used to perform an internet search?
10. How can artificial intelligence be used responsibly?

Enduring Understanding(s):

Students critically curate a variety of resources using digital tools to construct knowledge, produce creative artifacts and make meaningful learning experiences for themselves and others.

11. How can I effectively use AI prompt craft?	
Demonstration of Learning:	Pacing for Unit
Students will create a short research project..	Addressed throughout the year
Family Overview (link below)	Integration of Technology:
Family Overview	Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning.
Unit-specific Vocabulary:	Aligned Unit Materials, Resources, and Technology (beyond core resources):
Accuracy Advanced Search Advertisements Algorithm Artificial Intelligence Audience Author Authority Bias Boolean Operators Corroboration Credible Curate Database Deep Fakes Disinformation Domain Evaluate Fact Fact Checking Sites Filter Bubble Keyword Lateral Media Misinformation Notetaking Opinion Paraphrase Personalized Content Persuasion Point Of View Primary Sources Prompt Craft Propaganda Publisher Purpose Relevance Research Question Reverse Image Search Search Engine Search Engine Optimization Search Queries Source Sponsored Content Timeliness Topic URL Validity Website	Technology
Opportunities for Interdisciplinary Connections:	Anticipated misconceptions:
<ul style="list-style-type: none"> Any discipline that requires students to research or share knowledge learned from sources. Any discipline that requires students to work in a digital environment. Social Studies Guaranteed Research Experience Projects (GRE) Social Studies Inquiry Design Model Projects (IDMs). 	<ul style="list-style-type: none"> The internet makes it quick and easy to locate information. Typing questions into Google is the best way to locate information. Everything on the internet is true. Everything on the internet is free to use. Privacy does not matter when using the internet to search for information. I can get all of my information for research from one source. Copying and pasting is note taking.
Connections to Prior Units:	Connections to Future Units:

<ul style="list-style-type: none"> Grade 7 Information and Media Literacy Unit Students will use skills from the Grade 8 Digital Citizenship Unit to use a standard format of citation to avoid plagiarism and acknowledge the work of others. 	<ul style="list-style-type: none"> Grade 9 Information and Media Literacy Unit
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Differentiation through [Universal Design for Learning](#)

UDL Indicator

Teacher Actions:

GUIDELINE 2: Language & Symbols
CHECKPOINT 2.1 Clarify vocabulary and symbols

- Pre-teach vocabulary and symbols, especially in ways that promote connection to the learners' experience and prior knowledge
- Embed support for vocabulary and symbols within the text (e.g., hyperlinks or footnotes to definitions, explanations, illustrations, previous coverage, translations)

Supporting Multilingual/English Learners

Related [CELP standards:](#)

Learning Targets:

CELP 6-8.5
 An EL can conduct research and evaluate and communicate findings to answer questions or solve problems.

- I can...
- conduct short research projects to answer a question.
 - gather information from multiple print and digital sources.
 - use search terms effectively.
 - evaluate the credibility of each source.
 - quote or paraphrase the data and conclusions of others using charts, diagrams, or other graphics, as appropriate.
 - integrate information into an organized oral or written report.
 - cite sources.
 - use a standard format for citations.

Common Learning Experiences	Learning Target(s)	Success Criteria/ Assessment	Resources
Using Google Advanced Search	I can use search strategies to conduct effective internet searches.	I can use Google advanced search.	Google Search Engine Google Productivity Suite
T.R.A.A.P. Activity	I can evaluate search results to refine my searches and select sources.	<p>I can determine the timeliness of a website.</p> <p>I can determine the relevance of a website.</p> <p>I can determine the authority of a website.</p> <p>I can determine the accuracy of a website</p>	<p>Search Engines</p> <p>Google Productivity Suite</p> <p>T.R.A.A.P. Graphic Organizer</p>

		I can determine the purpose of a website.	
Lateral Reading Activity	I can evaluate search results to refine my searches and select sources.	I can evaluate the credibility of a website by using multiple websites. I can use fact checking websites.	Student Selected Websites Graphic Organizer
Evaluating Search Results Game Day Question Race	I can evaluate search results to refine my searches and select sources.	I can use databases and search engines to answer questions.	Google Forms
Independent Research Project Selecting a Topic and Focusing Research Activity	I can focus my research to answer a question?	I can select a topic. I can write a research question, I can write a thesis statement. I can create an outline.	Search Engines Artificial Intelligence Google Productivity Suite
Curate a List of Digital Sources Independent Research Project	I can gather relevant information from a variety of credible and accurate sources. I can use information from a variety of sources to support claims and answer questions.	I explore a topic of my choosing and record relevant information. I can use the information I gather to share what I learned.	Google Productivity Suite Search Engines
Using Reverse Image Searches to Identify Online Fake News	I can use a reverse image search to verify news content.	I can conduct a reverse image search to find information about an image's origin, context, and related content. I can explain in writing how a reverse image search verifies the credibility of an online news article.	Reverse Image Search Engines (Google Images, TinEye, Bing etc...)

Fake News Identification Activity	I can critically analyze online news articles and determine if they are legitimate and factual.	I can use a rubric to evaluate an online news article. I can explain in writing the evaluation of an online news article.	Online News Article Evaluation Rubric
News Comparison Activity	I can identify different types of media bias.	I can analyze several articles on the same topic and compare and contrast the way each article presents the information. I can explain in writing how articles on the same topic can have biases.	Online News Articles
AI Prompt Craft Activity	I can use an AI assistant to find relevant information and answer research questions. I can recognize the limitations of ai output.	I can identify the essential elements of a well-crafted AI prompt (C.R.A.F.T.). I can use the C.R.A.F.T graphic organizer to create effective ai prompts. I can create a digital poster to show at least three problems associated with AI assistants.	AI Assistances (Gemini, Perplexity, Chatgpt etc....)

Unit Title:

Unit 3: Growth (Curiosity and Discovery)

Relevant Standards: Bold indicates priority

**CT Core Standard
W 8.7**

Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.

**AASL Standard
Inquire - Think
I.A.1-2**

Learners display curiosity and initiative by:

1. Formulating questions about a personal interest or a curricular topic.
2. Recalling prior and background knowledge as context for new meaning.

ISTE

3. Knowledge Constructor

3a. Students plan and employ effective research strategies to locate information and other resources for their intellectual or create pursuits.

3b. Students evaluate the accuracy, perspective, credibility and relevance of information, media, data or other resources. 3c. Students curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions

AASL Standard

Inquire - Grow

I.D.1-4

Learners participate in an ongoing inquiry-based process by:

1. Continually seeking knowledge.
2. Engaging in sustained inquiry.
3. Enacting new understanding through real-world connections.
4. Using reflection to guide informed decisions.

ISTE

3. Knowledge Constructor

3d. Students build knowledge by actively exploring real-world issues and problems, developing ideas and theories and pursuing answers and solutions.

AASL Standard

Include -Think

II.A.2

Learners contribute a balanced perspective when participating in a learning community by:

2. Adopting a discerning stance toward points of view and opinions expressed in information resources and learning products.

AASL Standard

Explore -Think

V.A.1,3 Think

Learners develop and satisfy personal curiosity by:

1. Reading widely and deeply in multiple formats and write and create for a variety of purposes.
3. Engaging in inquiry-based processes for personal growth.

ISTE

6. Creative Communicator

6c. Students communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations.

Essential Question(s):	Enduring Understanding(s):
<ol style="list-style-type: none">1. How can I apply research skills to my personal interests?2. How do I develop and communicate my own perspective?3. How can I grow as a reader by reading widely and deeply in multiple formats?	Discover and innovate in a growth mindset developed through experience and reflection.
Demonstration of Learning:	Pacing for Unit
Students will create an advertisement for a library book.	addressed throughout the year
Family Overview (link below)	Integration of Technology:

Family Overview	Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning
Unit-specific Vocabulary:	Aligned Unit Materials, Resources, and Technology (beyond core resources):
Communicate Connections Curiosity Decisions Formats Inquiry Interests Multiple Opinion	Personalization Perspective Point of view Prior knowledge Promote Reflect Seek Stance
Opportunities for Interdisciplinary Connections:	Anticipated misconceptions:
Students can use the library to continue learning about topics they are studying in class. The library has materials aligned to all disciplines taught in school.	<ul style="list-style-type: none"> • The library does not have any books that match the interests of students. • The library only has one format of book. • Research skills are only for school projects.
Connections to Prior Units:	Connections to Future Units:
<ul style="list-style-type: none"> • Grade 7 Growth (Curiosity And Discovery) Unit • Students will use skills from the Grade 8 Digital Citizenship Unit to use a standard format of citation to avoid plagiarism and acknowledge the work of others. • Students will use skills from the Grade 8 Information and Media Literacy Unit to effectively locate and use information from the internet. 	<ul style="list-style-type: none"> • Grade 9 Growth (Curiosity And Discovery) Unit
Differentiation through Universal Design for Learning	
UDL Indicator	Teacher Actions:
GUIDELINE 9 Provide options for Self Regulation CHECKPOINT 9.1 Promote expectations and beliefs that optimize motivation	Multiple options need to be given to learners to help them stay motivated. <ul style="list-style-type: none"> • Provide prompts, reminders, guides, rubrics, checklists that focus on: <ul style="list-style-type: none"> ○ Elevating the frequency of self-reflection and self-reinforcements • Support activities that encourage self-reflection and identification of personal goals
Supporting Multilingual/English Learners	
Related CELP standards:	Learning Targets:

<p>CELP Standard 6-8.2 An EL can . . . construct meaning from oral presentations and literary and informational text through grade appropriate listening, reading, and viewing.</p>		<ul style="list-style-type: none"> • identify the main topic in oral communication and simple written texts • retell a few key details determine the central idea or theme in simple oral presentations or written text • explain how the central idea or theme is supported by specific details • summarize part of the text 	
Common Learning Experiences	Learning Target	Success Criteria/ Assessment	Resources
<p>Student-led Book Talks (Public Speaking Book Promotion)</p>	<p>I can evaluate the strengths and weaknesses of a book and provide evidence to support my opinions.</p> <p>I can effectively communicate my ideas, opinions, and recommendations about a book.</p>	<p>I can summarize main plot points, characters, themes author's writing style, character development, and use of literary devices.</p> <p>I can incorporate multimedia components like images, video clips, or props to enhance my presentation.</p> <p>I can respond to audience questions about the book.</p>	<p>Book Talk Menu</p> <p>Book Talk Guidelines</p> <p>Viewer Scoring Rubric</p> <p>Destiny Discover Online Library Catalog</p> <p>Google Productivity Suite Digital Media</p> <p>Communication Platforms</p>
<p>Student Choice Personal Interest Research Project</p>	<p>I can explore my interests in depth.</p> <p>I can communicate my own perspective.</p>	<p>I can use research skills to discover new topics, resources, or opportunities related to my passions.</p> <p>I can use research skills to communicate my ideas.</p>	<p>Google Productivity Suite</p> <p>Search Engines</p> <p>Databases</p> <p>Digital Communication Platforms</p>
<p>Book Check Out Process</p>	<p>I can select, locate and check out library books based on interests.</p>	<p>I can access and use the library's online catalogs to find suitable reading materials.</p> <p>I can navigate the library's organization system and locate books in different sections or collections.</p>	<p>Destiny Discover</p>
<p>Book Advertisement Project (Digital Book Promotion)</p>	<p>I can grow as a reader.</p>	<p>I can set reading goals.</p> <p>I can allocate a specific amount of time for reading.</p> <p>I can use the library online catalog to locate books that meet my personal interests.</p>	<p>Destiny Discover Online Library Catalog</p> <p>Google Productivity Suite Digital Media</p> <p>Communication Platforms</p>

		I can create an advertisement for a book that interests me.	
Independent Reading Participating in Library Reading Programs	I can read grade-level texts with deep understanding over an extended period of time.	I can maintain my focus and concentration while reading for an extended time without becoming distracted.	Library Books

Unit Title:

Unit 4: Show (Presentation of Information)

Relevant Standards: Bold indicates priority

CT Core Standards

RI 8.2

Determine a central idea of a text and analyze its development over the course of the text, including its relationship to supporting ideas; provide an objective summary of the text.

W 8.6

Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas efficiently as well as to interact and collaborate with others.

SL 8.2

Analyze the purpose of information presented in diverse media and formats (e.g., visually, quantitatively, orally) and evaluate the motives (e.g., social, commercial, political) behind its presentation.

AASL Standard

Inquire - Create

I.B.3

Learners engage with new knowledge by following a process that includes:

3. Generating products that illustrate learning.

ISTE

4. Innovative Designer

4a. Students select and use digital tools to plan and manage a design process that considers design constraints and calculated risks.

AASL Standard

Collaborate - Create

III.B.1

Learners participate in personal, social, and intellectual networks by:

1. Using a variety of communication tools and resources.

ISTE

6. Creative Communicator

6a. Students chose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.

7. Global Collaborator

7b. Students use collaborative technologies to work with others, including peers, experts or community members, to examine issues and problems from multiple viewpoints.

**AASL Standard
Engage - Create
VI.B.1-2**

Learners use valid information and reasoned conclusions to make ethical decisions in the creation of knowledge by:

1. Ethically using and reproducing others' work.
2. Acknowledging authorship and demonstrating respect for the intellectual property of others.

ISTE

2. Digital Citizen

2c. Demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property

**AASL Standard
Engage - Share
VI.C.1-2**

Learners responsibly, ethically, and legally share new information with a global community by:

1. Sharing information resources in accordance with modification, reuse, and remix policies.
2. Disseminating new knowledge through means appropriate for the intended audience.

ISTE

2. Digital Citizen

2c. Demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property.

6. Creative Communicator

6d. Students publish or present content that customizes the message and medium for their intended audience.

Essential Question(s):		Enduring Understanding(s):
<ol style="list-style-type: none"> 1. How do I demonstrate what I have learned? 2. How can I use digital media to communicate with an authentic audience? 3. How can I create engaging and informative digital media presentations? 		Students communicate clearly and express themselves creatively for a variety of purposes using the platforms, tools, styles, formats and digital media appropriate to their goals.
Demonstration of Learning:		Pacing for Unit
Students will create a digital media presentation.		addressed throughout the year
Family Overview (link below)		Integration of Technology:
Family Overview		Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning
Unit-specific Vocabulary:		Aligned Unit Materials, Resources, and Technology (beyond core resources):
Appealing Audience Boredom Community Delivery Digital Media	Disseminating Distraction Engagement Multimedia Presentation Software Storyboard	Technology

Opportunities for Interdisciplinary Connections:	Anticipated misconceptions:
<ul style="list-style-type: none"> Any discipline that requires students to present information to an audience. Any discipline that requires students to use digital media.. 	<ul style="list-style-type: none"> Students are tech-savvy enough and do not need to learn how to use digital media. All digital natives are confident in their technology skills. Technology is a classroom distraction and not a useful tool. Students know the characteristics of a good presentation. Students understand that digital media should be used to enhance the delivery of a presentation. Students understand the drawbacks of digital media and how to avoid them.
Connections to Prior Units:	Connections to Future Units:
<ul style="list-style-type: none"> Grade 7 Show (Presentation Of Information) Unit Students will use skills from the Grade 8 Digital Citizenship Unit to use a standard format of citation to avoid plagiarism and acknowledge the work of others. Students will use skills from the Grade 8 Information and Media Literacy Unit to effectively locate and use information from the internet. 	<ul style="list-style-type: none"> Grade 9 Show (Presentation Of Information) Unit
Differentiation through <i>Universal Design for Learning</i>	
UDL Indicator	Teacher Actions:
<p>GUIDELINE 3 Provide options for Comprehension CHECKPOINT 3.4 Maximize transfer and generalization</p>	<p>Supports for memory, generalization, and transfer include techniques that are designed to heighten the memorability of the information, as well as those that prompt and guide learners to employ explicit strategies.</p> <ul style="list-style-type: none"> Provide checklists, organizers, sticky notes, electronic rem-inders Prompt the use of mnemonic strategies and devices (e.g., visual imagery, paraphrasing strategies, method of loci, etc.) Incorporate explicit opportunities for review and practice Provide templates, graphic organizers, concept maps to support note-taking Provide scaffolds that connect new information to prior knowledge (e.g., word webs, half-full concept maps) Embed new ideas in familiar ideas and contexts (e.g., use of analogy, metaphor, drama, music, film, etc.) Offer opportunities over time to revisit key ideas and linkages between ideas

Supporting Multilingual/English Learners			
Related <i>CELP standards:</i>		Learning Targets:	
CELP Standard 6-8.1 An EL can construct meaning from oral presentations and literary and informational text through grade-appropriate listening, reading and viewing.		I can <ul style="list-style-type: none"> - Determine central ideas or themes in oral presentations or written text - Explain how the central ideas/themes are developed by supporting ideas or evidence - Summarize a text 	
Common Learning Experiences	Learning Target	Success Criteria/ Assessment	Resources
Presentation Evaluation Lesson Presentation Showdown Game	I can evaluate a digital media presentation.	I can use evaluation criteria to judge a digital media presentation. I can use a rubric to provide feedback on the effectiveness of a digital media presentation.	Digital Media Presentations Digital Media Presentation Evaluation Rubric and Feedback Form
Digital Media Presentation	I can create an engaging digital media presentation.	I can select a digital media tool to meet my needs. I can plan and organize a digital media presentation. I can use the features of a digital media tool to create a presentation. I can incorporate multimedia elements like images, videos, and audio clips to enhance my presentation. I can follow the best practices for creating an engaging digital media presentation. I can clearly and engagingly present my digital media project to an audience.	Digital Media Tools

<p>Ted Talk</p>	<p>I can create a Ted Talk Video in which I teach students how to create engaging presentations.</p>	<p>I can organize ideas and supporting details into a logical and coherent structure.</p> <p>I can utilize effective public speaking techniques, such as voice projection, body language and eye contact.</p> <p>I can use proper techniques for screen recordings.</p> <p>I can use editing techniques like cuts, transitions and graphics.</p>	<p>Chromebook Screencasting App</p>
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Course Title:	Content Area:	Grade Level:	Credit (if applicable)
Grades 9-10 Library Media	Library Media	Grades 9-10	
Course Description:			
<p>The school library media programs of Bristol Public Schools facilitate opportunities for students and faculty to become lifelong learners who thrive in complex learning environments. Through instructional strategies designed to infuse inquiry and technology as tools for learning, students will develop skills to interpret and develop new understandings, seek diverse perspectives, create new knowledge, and grow as ethical, digital citizens. Through equitable access to reading and information resources, the library media programs promote lifelong reading in a safe environment conducive to learning.</p>			
Aligned Core Resources:		Connection to the <i>BPS Vision of the Graduate</i>	
N/A		<p>COMMUNICATIONS AND TECHNOLOGY LITERACY</p> <ul style="list-style-type: none"> Use digital technology, communication tools, and/or networks to access, manage, integrate, evaluate, and create information in order to function in a knowledge society <p>INFORMATION LITERACY</p> <ul style="list-style-type: none"> Access information on efficiently (time) and effectively (sources) Evaluate information critically and competently Use information accurately and creatively for the issue or problem at hand Manage the flow of information from a wide variety of sources Apply a fundamental understanding of the ethical/legal issues surrounding the access and use of information <p>MEDIA LITERACY</p> <ul style="list-style-type: none"> Understand both how and why media messages are constructed, and for what purpose Examine how individuals interpret messages differently, how values and points of view are included or excluded, and how media can influence beliefs and behaviors Apply a fundamental understanding of the ethical/legal issues surrounding the access and use of media 	
Additional Course Information: <i>Knowledge/Skill Dependent courses/prerequisites</i>		Link to <i>Completed Equity Audit</i>	
		Grades 9-12 Library Media Equity Audit	
Standard Matrix			

District Learning Expectations and Standards	MODULE 1 DIGITAL CITIZENSHIP	MODULE 2 INQUIRY (RESEARCH)	MODULE 3 GROWTH (CURIOSITY AND DISCOVERY)	MODULE 4 SHOW (PRESENTATION OF INFORMATION)
CT Core Standards				
W/WHST 9-10.6 Use technology, including the Internet, to produce, publish, and update individual or shared writing products, taking advantage of technology's capacity to link to other information and to display information flexibly and dynamically.				S
W/WHST 9-10.7 Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.		P		
W/WHST 9-10.8 Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation.	S	P		
SL.2 Integrate multiple sources of information presented in diverse media or formats (e.g., visually, quantitatively, orally) evaluating the credibility and accuracy of each source.		P		
SL.5 Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.				P
American Association of School Librarian Standards (AASL)				
INQUIRE: Build new knowledge by inquiring, thinking critically, identifying problems, and developing strategies for solving problems. I.A.1-2 Think Learners display curiosity and initiative by: 1. Formulating questions about a personal interest or a curricular topic. 2. Recalling prior and background knowledge as context for new meaning.		P		

<p><i>ISTE</i></p> <p><i>1. Empowered Learner</i></p> <p><i>1c. Students use technology to seek feedback that informs and improves their practice and to demonstrate their learning in a variety of ways.</i></p> <p><i>3. Knowledge Constructor</i></p> <p><i>3a. Students plan and employ effective research strategies to locate information and other resources for their intellectual or create pursuits.</i></p> <p><i>3b. Students evaluate the accuracy, perspective, credibility and relevance of information, media, data or other resources.</i></p> <p><i>3c. Students curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions.</i></p> <p><i>3d. Students build knowledge by actively exploring real-world issues and problems, developing ideas and theories and pursuing answers and solutions.</i></p>				
<p>I.B.1 Think</p> <p>Learners engage with new knowledge by following a process that includes:</p> <p>1. Using evidence to investigate questions.</p> <p><i>NO ISTE CORRELATION</i></p>		P		
<p>1.B.3 Create</p> <p>Learners engage with new knowledge by following a process that includes:</p> <p>3. Generating products that illustrate learning.</p> <p><i>ISTE</i></p> <p><i>4. Innovative Designer</i></p> <p><i>4a. Students select and use digital tools to plan and manage a design process that considers design constraints and calculated risks.</i></p>				P
<p>I.D.1-4 Grow</p> <p>Learners participate in an ongoing inquiry-based process by:</p> <p>1. Continually seeking knowledge.</p> <p>2. Engaging in sustained inquiry.</p> <p>3. Enacting new understanding through real-world connections.</p> <p>4. Using reflection to guide informed decisions.</p> <p><i>ISTE</i></p> <p><i>3. Knowledge Constructor</i></p> <p><i>3d. Students build knowledge by actively exploring real-world issues and problems, developing ideas and theories and pursuing answers and solutions.</i></p>			P	
Collaborate				

Work effectively with others to broaden perspectives and work toward common goals				
<p>III.B.1 Share</p> <p>Learners participate in personal, social, and intellectual networks by:</p> <ol style="list-style-type: none"> Using a variety of communication tools and resources. <p><i>ISTE</i></p> <p><i>1. Empowered Learner</i></p> <p><i>1c. Students use technology to seek feedback that informs and improves their practice and to demonstrate their learning in a variety of ways.</i></p> <p><i>6. Creative Communicator</i></p> <p><i>6a. Students chose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.</i></p> <p><i>7. Global Collaborator</i></p> <p><i>7b. Students use collaborative technologies to work with others, including peers, experts or community members, to examine issues and problems from multiple viewpoints.</i></p>				P
<p>Curate</p> <p>Make meaning for oneself and others by collecting, organizing, and sharing resources of personal relevance.</p>				
<p>IV.A.1-3 Think</p> <p>Learners act on an information need by:</p> <ol style="list-style-type: none"> Determining the need to gather information. Identifying possible sources of information. Making critical choices about information sources to use. <p><i>ISTE</i></p> <p><i>3. Knowledge Constructor</i></p> <p><i>3c. Students curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions.</i></p>		P		
<p>IV.B.1-4 Create</p> <p>Learners gather information appropriate to the task by:</p> <ol style="list-style-type: none"> Seeking a variety of sources. Collecting information representing diverse perspectives. Systematically questioning and assessing the validity and accuracy of information. Organizing information by priority, topic, or other systematic scheme. <p><i>ISTE</i></p>		P		

<p>6. <i>Creative Communicator</i></p> <p>6a. <i>Students choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.</i></p> <p>6b. <i>Students create original works or responsibly repurpose or remix digital resources into new creations.</i></p> <p>6c. <i>Students communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations.</i></p> <p>6d. <i>Students publish or present content that customizes the message and medium for their intended audiences.</i></p>				
<p>EXPLORE</p> <p>Discover and innovate in a growth mindset developed through experience and reflection.</p>				
<p>V.A.1</p> <p>Learners develop and satisfy personal curiosity by:</p> <p>1. Reading widely and deeply in multiple formats and write and create for a variety of purposes.</p>			P	
<p>V.A.3 Think</p> <p>Learners develop and satisfy personal curiosity by:</p> <p>3. Engaging in inquiry-based processes for personal growth.</p> <p><i>ISTE</i></p> <p>3. <i>Knowledge Constructor</i></p> <p>3d. <i>Students build knowledge by actively exploring real-world issues and problems, developing ideas and theories and pursuing answers and solutions.</i></p>			S	
<p>V.C.1 Share</p> <p>Learners engage with the learning community by:</p> <p>1. Expressing curiosity about a topic of personal interest or curricular relevance.</p> <p><i>NO ISTE CORRELATION</i></p>			S	
<p>ENGAGE</p> <p>Demonstrate safe, legal, and ethical creating and sharing of knowledge products independently while engaging in a community of practice and an interconnected world.</p>				
<p>VI.A.1-3 Think</p> <p>Learners follow ethical and legal guidelines for gathering and using information by:</p> <p>1. Responsibly applying information, technology, and media to learning.</p> <p>2. Understanding the ethical use of information, technology, and media.</p>	P			S

<p>3. Evaluating information for accuracy, validity, social and cultural context, and appropriateness for need.</p> <p>2. <i>ISTE for Students: Digital Citizen</i></p> <p>2c. <i>Demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property.</i></p>				
<p>VI.B.1-2 Create</p> <p>Learners use valid information and reasoned conclusions to make ethical decisions in the creation of knowledge by:</p> <ol style="list-style-type: none"> 1. Ethically using and reproducing others' work. 2. Acknowledging authorship and demonstrating respect for the intellectual property of others. <p><i>ISTE</i></p> <p>2. <i>Digital Citizen</i></p> <p>2c. <i>Demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property.</i></p>	P	S		
<p>VI.C.1 Share</p> <p>Learners responsibly, ethically, and legally share new information with a global community by:</p> <ol style="list-style-type: none"> 1. Sharing information resources in accordance with modification, reuse, and remix policies. 2. Disseminating new knowledge through means appropriate for the intended audience <p><i>ISTE</i></p> <p>2. <i>Digital Citizen</i></p> <p>2c. <i>Demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property.</i></p> <p>6. <i>Creative Communicator</i></p> <p>6d. <i>Students publish or present content that customizes the message and medium for their intended audience.</i></p>	P	S		P

Unit Links

If unit headings are formatted as a heading, then we can link a Table of Contents to better organize and provide faster access to each unit

[Module 1: Digital Citizenship](#)

[Module 2: Inquiry \(Research\)](#)

[Module 3: Growth \(Curiosity/Discovery\)](#)

[Module 4: Show \(Presentation of Information\)](#)

Unit Title:	
Module 1: Digital Citizenship	
Relevant Standards: Bold indicates priority	
<p>AASL: VI.A.1-2 Follow ethical and legal guidelines for gathering and using information by 1. Responsibly applying information, technology, and media to learning. 2. Understanding the ethical use of information, technology, and media. VI.B.1-2 Learners use valid information and reasoned conclusions to make ethical decisions in the creation of knowledge by: 1. Ethically using and reproducing others' work. 2. Acknowledging authorship and demonstrating respect for the intellectual property of others. VI.C.1-2 Learners responsibly, ethically, and legally share new information with a global community by: 1. Sharing information resources in accordance with modification, reuse, and remix policies. 2. Disseminating new knowledge through means appropriate for the intended audience.</p> <p>ISTE: 2 Digital Citizen, 2c. Demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property.</p> <p>CCSS: <i>W/WHST 9-10.8</i> Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation.</p>	
Essential Question(s):	Enduring Understanding(s):
<ul style="list-style-type: none"> How can I follow a standard format for citation? How can I combine credible and accurate information from diverse media sources? 	I can use information responsibly and ethically.
Demonstration of Learning:	Pacing for Unit
<p>Culminating activities dependent on subject area partnership. Options could include:</p> <ul style="list-style-type: none"> Work cited page In-text citation 	Pacing of unit is dependent on classroom teacher schedule/request.
Family Overview (link below)	Integration of Technology:
Digital Citizenship Resources for Family Engagement	Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning
Unit-specific Vocabulary:	Aligned Unit Materials, Resources, and Technology (beyond core resources):
Cite, ethical, media, credibility, source, plagiarism, intellectual property, creative commons, copyright, references	<ul style="list-style-type: none"> Common Sense Media Noodle Tools Google Citation Generator

Opportunities for Interdisciplinary Connections:		Anticipated misconceptions:	
Any discipline requiring research, or sharing knowledge learned from other sources		<ul style="list-style-type: none"> • URLs are enough for a citation. • Media (pictures, videos, songs) does not need to be cited. • If I cannot find an immediate answer to my question by Googling it, I need to change my topic. • If I put something in quotes, I'm not plagiarizing. 	
Connections to Prior Units:		Connections to Future Units:	
Connections to: <ul style="list-style-type: none"> • Grade 6-8 Digital Citizenship activities • Grade 6-8 Citation creation 		Connections to: <ul style="list-style-type: none"> • Determining citation styles (MLA, APA) based on content requirements 	
Differentiation through <i>Universal Design for Learning</i>			
UDL Indicator		Teacher Actions:	
Expression & Communication 5.3		<ul style="list-style-type: none"> • Provide scaffolds that can be gradually released with increasing independence and skills 	
Supporting Multilingual/English Learners			
Related <i>CELP standards:</i>		Learning Targets:	
9-12.2 An EL can participate in grade appropriate oral and written exchanges of information, ideas, and analyses, responding to peer, audience, or reader comments and questions.		See italicized targets below.	
Lesson Sequence	Learning Target	Success Criteria/ Assessment	Resources
	I can create a work cited page.	<input type="checkbox"/> I can use Google Citation Generator or Noodle Tools to create a citation for a source.	Noodle Tools Google Docs
	I can use in-text citations.	<input type="checkbox"/> I can use Google Citation Generator or Noodle Tools to create an in-text citation for a source. <input type="checkbox"/> I can insert in-text citations when I paraphrase or use a direct quotation from a source.	Noodle Tools Google Docs
	<i>I can select and use an appropriate digital medium to present content to my</i>	<input type="checkbox"/> I can create a Google Doc, Google Slide or	Google Doc Google Slide

	audience.	Canva (or teacher requested platform) to show information learned. <input type="checkbox"/> I can include appropriate citations in my final product.	Canva
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Unit Title:

Module 2: Inquiry (Research)

Relevant Standards: Bold indicates priority

AASL:

I.A.1-2 Learners display curiosity and initiative by: 1. Formulating questions about a personal interest or a curricular topic. 2. Recalling prior and background knowledge as context for new meaning

I.B.1 Learners engage with new knowledge by following a process that includes: 1. Using evidence to investigate questions.

IV.A.1-3 Learners act on an information need by: 1. Determining the need to gather information. 2. Identifying possible sources of information. 3. Making critical choices about information sources to use.

IV.B.1-4 Learners gather information appropriate to the task by: 1. Seeking a variety of sources. 2. Collecting information representing diverse perspectives. 3. Systematically questioning and assessing the validity and accuracy of information. 4. Organizing information by priority, topic, or other systematic scheme.

VI.B.1-2 Learners use valid information and reasoned conclusions to make ethical decisions in the creation of knowledge by 1. Ethically using and reproducing others' work. 2. Acknowledging authorship and demonstrating respect for the intellectual property of others.

VI.C.1 Learners responsibly, ethically, and legally share new information with a global community by: 1. Sharing information resources in accordance with modification, reuse, and remix policies. 2. Disseminating new knowledge through means appropriate for the intended audience.

ISTE:

1. Empowered Learner

1c. Students use technology to seek feedback that informs and improves their practice and to demonstrate their learning in a variety of ways.

2. Digital Citizen

2c. Demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property.

3. Knowledge Constructor

3a. Students plan and employ effective research strategies to locate information and other resources for their intellectual or creative pursuits.

3b. Students evaluate the accuracy, perspective, credibility and relevance of information, media, data or other resources.

3c. Students curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions.

3d. Students build knowledge by actively exploring real-world issues and problems, developing ideas and theories and pursuing answers and solutions.

6. Creative Communicator

6a. Students choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.

6b. Students create original works or responsibly repurpose or remix digital resources into new creations.

6c. Students communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations.

6d. Students publish or present content that customizes the message and medium for their intended audiences.

CCSS:

W/WHST 9-10.7 Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.

W/WHST 9-10.8 Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation.


SL.2 --Integrate multiple sources of information presented in diverse media or formats (e.g., visually, quantitatively, orally evaluating the credibility and accuracy of each source.

Essential Question(s):	Enduring Understanding(s):
<ul style="list-style-type: none"> ● How can I conduct research projects to answer a question or solve a problem? ● How can I narrow or broaden my inquiry appropriately? ● How can I synthesize multiple sources on a subject? ● How can I gather relevant information from a variety of authoritative sources? ● How can I use search terms effectively? ● How can I use advanced searches effectively? ● How can I assess the strengths and limitations of each source in terms of task, purpose, and audience? 	<p>Research is a multi-step process.</p>
Demonstration of Learning:	Pacing for Unit
<p>Culminating activities dependent on subject area partnership. Options could include:</p> <ul style="list-style-type: none"> ● Work cited page ● In-text citation ● Research product 	<p>Pacing of unit is dependent on classroom teacher schedule/request.</p>
Family Overview (link below)	Integration of Technology:
<p>Library Learning Resources Research and Citing</p>	<p><i>Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning</i></p>
Unit-specific Vocabulary:	Aligned Unit Materials, Resources, and Technology (beyond core resources):
<p>Evaluation, accuracy, authority, credibility, source, purpose, validity, currency, URL, domain name, relevance,</p>	<ul style="list-style-type: none"> ● Noodle Tools ● Google Citation generator ● Google docs, slides ● Databases

bias, objective, publisher, subject headings, reference, database			
Opportunities for Interdisciplinary Connections:		Anticipated misconceptions:	
Any discipline requiring research, or sharing knowledge learned from other sources		<ul style="list-style-type: none"> • They can't put anything on the internet that isn't true. • Commercially sponsored information is objective and balanced. • You can always get balanced information from one source. • Websites are the same as webpages. • Website names start with "www". • All. orgs are good sources. 	
Connections to Prior Units:		Connections to Future Units:	
Connections to: <ul style="list-style-type: none"> • Grades 6-8 GREs 		Connections to: <ul style="list-style-type: none"> • Grades 11-12 research varies by subject/teacher request 	
Differentiation through <i>Universal Design for Learning</i>			
UDL Indicator		Teacher Actions:	
Action & Expression 6.3		<ul style="list-style-type: none"> • Provide graphic organizers and templates for data collection and organizing information • Provide checklists and guides for note-taking 	
Supporting Multilingual/English Learners			
Related <i>CELP standards:</i>		Learning Targets:	
9-12.5 An EL can conduct research and evaluate and communicate findings to answer questions or solve problems.		See italicized learning targets below.	
Lesson Sequence	Learning Target	Success Criteria/ Assessment	Resources
1	<i>I can develop a research question and select appropriate search terms.</i>	<input type="checkbox"/> I can create an open-ended question about my topic. <input type="checkbox"/> I can identify key terms to narrow my search.	Boolean phrases
	I can use strategies to effectively	<input type="checkbox"/> I can use C.R.A.A.P.	Internet access

	evaluate websites/sources.	(or other tool) as a strategy to choose relevant websites. <input type="checkbox"/> I can use database(s) to search for information about my topic.	Sources list Database access
	I can use tools to create a proper citation. I can create a work cited page to give credit to my sources.	<input type="checkbox"/> I can use Google Citation Generator or Noodle Tools to create a citation(s) for a source.	Google Docs Noodle Tools
	<i>I can use my research notes to create a published product.</i>	<input type="checkbox"/> I can use a structure to organize my notes. <input type="checkbox"/> I can select an appropriate platform to show my learning.	Graphic organizer for notes Platform options- Canva, Google Doc/slides, other as assigned by teacher

Unit Title:	
Module 3: Growth (Curiosity/Discovery)	
Relevant Standards: Bold indicates priority	
<p>AASL: I.D.1-4 1. Continually seeking knowledge. 2. Engaging in sustained inquiry. 3. Enacting new understanding through real-world connections. 4. Using reflection to guide informed decisions V.A.1 Reading widely and deeply in multiple formats and write and create for a variety of purposes. V.A.3 Engaging in inquiry-based processes for personal growth. V.C.1 Expressing curiosity about a topic of personal interest or curricular relevance.</p> <p>ISTE: <i>Knowledge Constructor</i> 3d. Students build knowledge by actively exploring real-world issues and problems, developing ideas and theories and pursuing answers and solutions.</p>	
Essential Question(s):	Enduring Understanding(s):
1. How can I apply research project skills to personal interests? 2. How can I collaborate with other learners when researching topics of personal interest?	Reading is learning. Exploring interests is an important part of personal growth.

3. How can I grow as a reader by reading widely and deeply in multiple formats?			
Demonstration of Learning:		Pacing for Unit	
Students select/check out books and utilize the Library (with a class or independently).		Pacing of unit is dependent on classroom teacher and/or student schedule/request.	
Family Overview (link below)		Integration of Technology:	
 Getting Started with Students Tutorial - Follett Des...		<i>Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning</i>	
Unit-specific Vocabulary:		Aligned Unit Materials, Resources, and Technology (beyond core resources):	
Catalog, Subject Headings, Call Numbers, renew		<ul style="list-style-type: none"> • Destiny • Sora 	
Opportunities for Interdisciplinary Connections:		Anticipated misconceptions:	
Any discipline requiring independent learning/research, or sharing knowledge learned from other sources.		<ul style="list-style-type: none"> • Students will apply research criteria when inquiring for personal interests and growth. • Students know how to appropriately interact in online discussions/ collaborations. • Books are only for schoolwork. 	
Connections to Prior Units:		Connections to Future Units:	
Connections to: <ul style="list-style-type: none"> • Grades 6-8 book talks, book reviews, self-generated projects 		Connections to: <ul style="list-style-type: none"> • College and career exploration 	
Differentiation through Universal Design for Learning			
UDL Indicator		Teacher Actions:	
Recruiting Interest Checkpoints 7.1		Provide learners with as much discretion and autonomy as possible by providing choices in the context or content used for practicing and assessing skills.	
Supporting Multilingual/English Learners			
Related CELP standards:		Learning Targets:	
12.1 An EL can construct meaning from oral presentations and literary and informational text through grade appropriate listening , reading , and viewing.		See italicized learning targets below.	
Lesson Sequence	Learning Target	Success Criteria/ Assessment	Resources

1	I can locate information on a topic of interest.	<input type="checkbox"/> I can use Destiny to search for information. <input type="checkbox"/> I can use effective online search strategies to locate information. <input type="checkbox"/> I can use a Library database to search for information.	Destiny Internet Databases
	<i>I can choose reading material for personal enjoyment.</i>	<input type="checkbox"/> I can use Destiny and Sora to locate books, ebooks and audiobooks.	Destiny Sora
	I can collaborate with others to conduct research.	<input type="checkbox"/> I can work with classmates to complete a task.	Google Doc

Unit Title:

Module 4: Show (Presentation of Information)

Relevant Standards: Bold indicates priority

AASL:

I.B.3 Learners engage with new knowledge by following a process that includes: Generating products that illustrate learning.

III.B.1 Learners participate in personal, social, and intellectual networks by: 1. Using a variety of communication tools and resources.

VI.C.1-2 Learners responsibly, ethically, and legally share new information with a global community by: 1. Sharing information resources in accordance with modification, reuse, and remix policies. 2. Disseminating new knowledge through means appropriate for the intended audience.

VI.A.1-3 Follow ethical and legal guidelines for gathering and using information by 1. Responsibly applying information, technology, and media to learning. 2. Understanding the ethical use of information, technology, and media. 3. Evaluating information for accuracy, validity, social and cultural context, and appropriateness for need.

ISTE:

Innovative Designer

4a. Students know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts or solving authentic problems.

Empowered Learner

1c. Students use technology to seek feedback that informs and improves their practice and to demonstrate their learning in a variety of ways.

Creative Communicator

6a. Students chose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.

Global Collaborator

7b. Students use collaborative technologies to work with others, including peers, experts or community members, to examine issues and problems from multiple viewpoints.

Digital Citizen

2c. Demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property.

Creative Communicator

6d. Students publish or present content that customizes the message and medium for their intended audience.

CCSS:

SL.5 -- Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.

W/WHST 9-10.6 Use technology, including the Internet, to produce, publish, and update individual or shared writing products, taking advantage of technology's capacity to link to other information and to display information flexibly and dynamically.

Essential Question(s):	Enduring Understanding(s):
<ol style="list-style-type: none"> How can I use technology to produce, publish, and update writing products in response to ongoing feedback, new arguments, and new information? How can I strategically use digital media in presentations to enhance understanding of findings, reasoning, and evidence and to add interest? 	<p>There is more than one way to demonstrate learning.</p>
Demonstration of Learning:	Pacing for Unit
<p>Culminating activities dependent on subject area partnership. Options could include:</p> <ul style="list-style-type: none"> Google Slide/doc Canva Audio or visual recording 	<p>Pacing of unit is dependent on classroom teacher schedule/request.</p>
Family Overview (link below)	Integration of Technology:
<p>5 Reasons Multimedia Presentations Are a Classroom Must Common Sense Education</p>	<p><i>Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning</i></p>
Unit-specific Vocabulary:	Aligned Unit Materials, Resources, and Technology (beyond core resources):
<p>Remix Creative commons Plagiarism</p>	<ul style="list-style-type: none"> Google Suite Canva Creative Commons

Cite Ethical Credibility Intellectual Property Creative Commons Copyright E-mail Electronic Forum Electronic Chat			
Opportunities for Interdisciplinary Connections:		Anticipated misconceptions:	
Any discipline requiring presentation of information or creation to express oneself on a topic.		<ul style="list-style-type: none"> All multimedia is created equal. There doesn't need to be criteria for the multi-media I add to my work. 	
Connections to Prior Units:		Connections to Future Units:	
Connects to: <ul style="list-style-type: none"> Grades 6-8 presentation, speech, digital media tools, Creative Commons lesson 		Connects to: <ul style="list-style-type: none"> Grades 11-12 culminating projects or mastery credit 	
Differentiation through <i>Universal Design for Learning</i>			
UDL Indicator		Teacher Actions:	
Action & Expression 5.1		<ul style="list-style-type: none"> Compose in multiple media such as text, speech, drawing, illustration, comics, storyboards, design, film, music, dance/movement, visual art, sculpture, or video 	
Supporting Multilingual/English Learners			
Related <i>CELP standards:</i>		Learning Targets:	
An EL can speak and write about Grade-appropriate complex literary and informational texts and topics.		See italicized learning target below.	
Lesson Sequence	Learning Target	Success Criteria/ Assessment	Resources
1	<i>I can effectively use technology to demonstrate my learning.</i>	<input type="checkbox"/> I can use my notes/class material to make a plan for a final product. <input type="checkbox"/> I can create a [Google slide, Google doc, Canva, recording,	Google Suite Canva

		other] that gives information on the topic.	
	I can give and receive feedback with classmates and/or teachers.	<input type="checkbox"/> I can complete a rubric to help review my own and a classmate's product.	Rubric
	I can apply digital citizenship skills when creating/sharing projects.	<input type="checkbox"/> I can locate creative commons materials for use in my projects <input type="checkbox"/> I can give credit to outside sources/materials used in my finished project.	Citation generating app (Noodletools)

Course Title:	Content Area:	Grade Level:	Credit (if applicable)
Botany	Science	10-12	0.5
Course Description:			
<p>This semester-long laboratory-based science course introduces students to the characteristics and life cycles of plants. The course covers plant diversity and plant structure and function. Additionally, students will explore the importance plants have in their everyday lives, that includes food and medicine. The focus of this course is on seed plants. Greenhouse and outdoor labs (outdoor classroom and campus rain garden) will be used to conduct a variety of research products. Students will continue to develop knowledge in the core disciplinary ideas in the Life and Earth sciences described in the Next Generation Science Standards (NGSS). This will be a student centered, inquiry based class aimed at developing and refining students ability to plan and conduct investigations to answer questions about characteristics, life cycles, and structure/function of plants and ecosystem services provided by plants.</p>			
Aligned Core Resources:		Connection to the <i>BPS Vision of the Graduate</i>	
		<p>COLLABORATION</p> <ul style="list-style-type: none"> ● Demonstrates ability to work effectively and respectfully with diverse teams ● Exercise flexibility and willingness to be helpful in making necessary compromises to accomplish a common goal ● Assume shared responsibility for collaborative work and value the individual contributions made by each team member ● Articulates thoughts and ideas effectively using oral, written and nonverbal communication skills in a variety of forms and contexts <p>INFORMATION LITERACY</p> <ul style="list-style-type: none"> ● Use information accurately and creatively for the issue or problem at hand <p>CONTENT MASTERY</p> <ul style="list-style-type: none"> ● Develop and draw from a baseline understanding of knowledge in academic disciplines from our Bristol curriculum 	
Additional Course Information: <i>Knowledge/Skill Dependent courses/prerequisites</i>		Link to <i>Completed Equity Audit</i>	
		Botany Equity Audit	
Standard Matrix			

NGSS Science Practices	Unit 1	Unit 2	Unit 3	Unit 4
Asking questions and defining problems: Asking questions and defining problems in 9–12 builds on K–8 experiences and progresses to formulating, refining, and evaluating empirically testable questions and design problems using models and simulations.	X	X	X	X
Developing and Using Models: Modeling in 9–12 builds on K–8 experiences and progresses to using, synthesizing, and developing models to predict and show relationships among variables between systems and their components in the natural and designed worlds.				X
Planning and Carrying out Investigations: Planning and carrying out investigations in 9–12 builds on K–8 experiences and progresses to include investigations that provide evidence for and test conceptual, mathematical, physical, and empirical models.		X	X	
Analyzing and Interpreting Data: Analyzing data in 9–12 builds on K–8 experiences and progresses to introducing more detailed statistical analysis, the comparison of data sets for consistency, and the use of models to generate and analyze data.				X
Using Mathematics and Computational Thinking: Mathematical and computational thinking in 9–12 builds on K–8 experiences and progresses to using algebraic thinking and analysis, a range of linear and nonlinear functions including trigonometric functions, exponentials and logarithms, and computational tools for statistical analysis to analyze, represent, and model data. Simple computational simulations are created and used based on mathematical models of basic assumptions.				X
Constructing Explanations and Designing Solutions: Constructing explanations and designing solutions in 9–12 builds on K–8 experiences and progresses to explanations and designs that are supported by multiple and independent student-generated sources of evidence consistent with scientific ideas, principles, and theories.	X	X	X	X
Engaging in Argument from Evidence: Engaging in argument from evidence in 9–12 progresses to using appropriate and sufficient evidence and scientific reasoning to defend and critique claims and explanations about the natural and designed world(s). Arguments may also come from current scientific or historical episodes in science.				X
Obtaining, Evaluating, and Communicating Information: Obtaining, evaluating, and communicating information progresses to evaluating the validity and reliability of the claims, methods, and designs.				X

Unit Links

[Introduction to Botany](#)

[Pollination and Growth](#)

[Wide World of Plants](#)

[Plants and Man](#)

Unit Title:	
Introduction to Botany	
Relevant Standards: Bold indicates priority	
Asking questions and defining problems; Constructing Explanations and Designing Solutions	
Essential Question(s):	Enduring Understanding(s):
<ul style="list-style-type: none"> • How do plants' structures and cellular components support their overall function, survival, and adaptation in various ecosystems? • What mechanisms do plants use to communicate and respond to their environment, and how do these mechanisms contribute to their survival and ecosystem services? • What are the significant benefits that plants provide to ecosystems and human society, particularly in terms of ecosystem services, medicine, and agriculture? 	<ul style="list-style-type: none"> • Plants have specialized structures and cellular components that are intricately designed to support their overall function, survival, and adaptation in diverse ecosystems. • Plants communicate and respond to their environment through complex mechanisms that enhance their survival and contribute to the stability and health of ecosystems. • Plants provide essential benefits to ecosystems and human society, including crucial ecosystem services, medicinal resources, and agricultural productivity.
Demonstration of Learning:	Pacing for Unit
	11 blocks
Unit-specific Vocabulary:	
Annual, Perennial, Biennial, Evergreen, Deciduous, Biodiversity, Natural Resources, Renewable And Nonrenewable Resources, Botany, Canopy, Chlorophyll, Root, Stalk, Stem, Tissue, Petiole, Leaf Structure, Flower, Pollen, Ovary, Xylem, Phloem, Epidermis, Ecosystem Service, Biomes, Monocot, Dicot, Photosynthesis	
Anticipated misconceptions:	

1. **Misconception: Plants do not perform respiration; they only perform photosynthesis.**
 - **Clarification:** Plants perform both photosynthesis and cellular respiration. Photosynthesis occurs in the chloroplasts and produces glucose and oxygen, while cellular respiration occurs in the mitochondria and uses glucose and oxygen to produce energy (ATP), carbon dioxide, and water.
2. **Misconception: Plants get their food from the soil.**
 - **Clarification:** Plants produce their own food through photosynthesis. They absorb water and minerals from the soil, but their primary source of energy is glucose, which they make from carbon dioxide and water using sunlight.
3. **Misconception: Only leaves are involved in photosynthesis.**
 - **Clarification:** While leaves are the primary sites for photosynthesis due to their high concentration of chloroplasts, other green parts of the plant, such as stems and unripe fruit, can also perform photosynthesis to a lesser extent.
4. **Misconception: Plants do not need oxygen.**
 - **Clarification:** Plants need oxygen for cellular respiration, which occurs in all living cells, including plant cells. Oxygen is necessary to break down glucose into usable energy.
5. **Misconception: All plants have flowers.**
 - **Clarification:** Not all plants produce flowers. Flowering plants (angiosperms) do, but other plants, like conifers (gymnosperms), ferns, mosses, and algae, do not produce flowers.
6. **Misconception: All plants are green.**
 - **Clarification:** While many plants are green due to chlorophyll, there are plants with other pigments that give them different colors. Some plants may have red, purple, or yellow pigments, especially in leaves, flowers, and fruits.
7. **Misconception: The sole purpose of roots is to anchor the plant.**
 - **Clarification:** Roots anchor the plant in the soil, but they also absorb water and nutrients, store food, and can sometimes perform vegetative reproduction.
8. **Misconception: Plants grow towards the light because they are "seeking" it.**
 - **Clarification:** Plants grow towards the light due to phototropism, a growth response triggered by unequal distribution of the hormone auxin, which causes cells on the shaded side of the plant to elongate more than those on the lighted side.
9. **Misconception: Photosynthesis occurs all the time in plants.**
 - **Clarification:** Photosynthesis requires light, so it primarily occurs during daylight hours. At night, plants continue to respire, using the glucose produced during the day.
10. **Misconception: All plants need the same amount of water and sunlight.**
 - **Clarification:** Different plants have different requirements for water and sunlight based on their adaptations to their native environments. Some plants thrive in full sunlight with little water, while others require shade and constant moisture.
11. **Misconception: Plants do not move.**
 - **Clarification:** While plants are rooted in place, they exhibit various types of movement such as the opening and closing of flowers, growth towards light (phototropism), and movement in response to touch (thigmotropism).
12. **Misconception: Soil is just a medium for holding plants.**
 - **Clarification:** Soil is a complex ecosystem that provides essential nutrients, water, and support for plants. It also hosts a variety of organisms that help decompose organic matter and recycle nutrients.

Differentiation through [Universal Design for Learning](#)

UDL Indicator

Teacher Actions:

<p>Representation: Clarify vocabulary and symbols</p>	<ul style="list-style-type: none"> • Pre-teach vocabulary and symbols, especially in ways that promote connection to the learners’ experience and prior knowledge • Provide graphic symbols with alternative text descriptions • Highlight how complex terms, expressions, or equations are composed of simpler words or symbols • Embed support for vocabulary and symbols within the text (e.g., hyperlinks or footnotes to definitions, explanations, illustrations, previous coverage, translations) • Embed support for unfamiliar references within the text (e.g., domain specific notation, lesser known properties and theorems, idioms, academic language, figurative language, mathematical language, jargon, archaic language, colloquialism, and dialect)
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Supporting Multilingual/English Learners

Related CELP standards:

Learning Targets:

**The CELP guidance is to support the development of language; access to course content expectations should not change as a result of MLL status.*

I can identify features of plants and explain their importance to the overall function and survival

An EL can conduct research and evaluate and communicate findings to answer questions or solve problems.

- Level 1: I can gather information to help me label a plant diagram.
- Level 2: I can conduct individual or shared research that explains the function of a plant.
- Level 3 I can paraphrase key information regarding the function of a plant and provide diagrams to support this information.
- Level 4: I can gather and synthesize information from multiple print and digital sources that build on my knowledge of the structure and function of plants.
- Level 5: I can analyze and integrate information into a clearly organized oral or written text that explains the anchoring phenomenon of the sensitive plant.

Lesson Sequence	Learning Target	Success Criteria/Assessment/ Resources
<p>1 Intro to Botany</p>	<p>I can brainstorm how and why plant react as seen in sensitive plant phenomenon</p> <p>I can identify features of plants and explain their importance to the overall function and survival</p>	<ul style="list-style-type: none"> • I can determine the different types of plants • I can determine the basic structure of plants and flowers and build a model that exemplifies that structure and its corresponding function • I can relate the structure of a plant back to the the overall function • I can determine the structure of plant cells

	<p>I can determine ecosystem services and other important benefits of plants, particularly in medicine and agriculture</p>	<ul style="list-style-type: none">• I can relate parts of a plant cell to photosynthetic activities• I can explain the mechanisms that are involved in plant communication• I can identify multiple ecosystem services that photosynthesis provides• I can investigate the factors that affect photosynthesis• I can identify adaptations that plants would need to have in various biomes and climates
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Unit Title:	
Pollination and Growth	
Relevant Standards: Bold indicates priority	
Planning and Carrying Out Investigations; Constructing Explanations and Designing Solutions	
Essential Question(s):	Enduring Understanding(s):
<ul style="list-style-type: none"> • How do plants grow, develop, and reproduce, and what role do pollinators play in these processes? • What are the factors affecting the growth and development of plants, and how can these factors be tested and observed? • Why are pollinators declining, what are the consequences of this decline, and what solutions can be proposed to address it? 	<p>The Interconnectedness of Plant and Pollinator Life Cycles</p> <ul style="list-style-type: none"> • Plants rely on specific mechanisms and symbiotic relationships for growth, development, and reproduction. Pollinators play a crucial role in the pollination process, which is essential for plant reproduction and biodiversity. Understanding these connections highlights the complexity and interdependence of ecosystems. <p>Scientific Inquiry and Experimentation</p> <ul style="list-style-type: none"> • Investigating plant growth and development requires careful observation, hypothesis formulation, and experimental testing. By examining various factors that impact plant health, students learn the importance of the scientific method in studying living organisms and ecosystems. <p>Impact and Mitigation of Pollinator Decline</p> <ul style="list-style-type: none"> • Pollinator populations are declining due to various environmental and anthropogenic factors, posing a significant threat to global biodiversity and food security. By identifying these factors and developing potential solutions, students recognize the importance of conservation efforts and sustainable practices in protecting pollinators and, by extension, ecosystems and human agriculture.
Demonstration of Learning:	Pacing for Unit
	11 blocks
Unit-specific Vocabulary:	

Pollination, Pollinator, Life Cycle, Seed, Sprout, Agriculture, Biotic, Abiotic, Carrying Capacity, Population, Overpopulation, DNA, Evolution, Paleobotany

Anticipated misconceptions:

- Pollination is the same as fertilization.**
 - Clarification:** Pollination is the transfer of pollen from the male part of a flower (anther) to the female part (stigma), while fertilization occurs when the pollen reaches the ovule and forms a seed. They are distinct processes within the plant reproductive cycle.
- All plants require insects for pollination.**
 - Clarification:** While many plants rely on insects for pollination, others are pollinated by wind, water, birds, bats, and other animals. Some plants can even self-pollinate.
- Pollination only benefits plants.**
 - Clarification:** Pollination is mutually beneficial. Pollinators, such as bees, butterflies, and birds, get nectar or pollen as a food source, while plants benefit from the transfer of pollen necessary for reproduction.
- Only bees are pollinators.**
 - Clarification:** Besides bees, many other insects (e.g., butterflies, moths, flies, beetles), birds (e.g., hummingbirds), bats, and even some mammals are effective pollinators.
- Pollination is not important to humans.**
 - Clarification:** Pollination is crucial for the production of fruits, vegetables, and nuts, which are important parts of the human diet. Many crops are pollinator-dependent, affecting food security and economies.
- All flowers are designed to attract pollinators.**
 - Clarification:** While many flowers have evolved to attract pollinators with bright colors, scents, and nectar, some plants have flowers that are specifically adapted for wind or water pollination and may not be visually or olfactorily appealing.
- Pollinators are only active during the daytime.**
 - Clarification:** While many pollinators are diurnal (active during the day), there are also nocturnal pollinators like moths and bats that play a significant role in pollination.

Differentiation through [Universal Design for Learning](#)

UDL Indicator

Engagement: Optimize relevance, value, and authenticity

Teacher Actions:

- Vary activities and sources of information so that they can be:
 - Personalized and contextualized to learners' lives
 - Culturally relevant and responsive
 - Socially relevant
 - Age and ability appropriate
 - Appropriate for different racial, cultural,

	<p>ethnic, and gender groups</p> <ul style="list-style-type: none"> ● Design activities so that learning outcomes are authentic, communicate to real audiences, and reflect a purpose that is clear to the participants ● Provide tasks that allow for active participation, exploration and experimentation ● Invite personal response, evaluation and self-reflection to content and activities ● Include activities that foster the use of imagination to solve novel and relevant problems, or make sense of complex ideas in creative ways
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Supporting Multilingual/English Learners

Related <i>CELP standards:</i>	Learning Targets:
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**The CELP guidance is to support the development of language; access to course content expectations should not change as a result of MLL status.*

I can identify features of plants and explain how and why plants are pollinated.

An EL can construct meaning from oral presentations and literary and informational text through grade-appropriate listening, reading, and viewing.

- Level 1: I can identify key words that relate to pollination.
- Level 2: I can explain how key words relate to pollination. .
- Level 3 I can summarize the process of pollination using the structures of a flower.
- Level 4: I can explain in detail the process of pollination and how it leads to the survival of other living things.
- Level 5: I can create a solution that addresses the causes of pollinator decline.

Lesson Sequence	Learning Target	Success Criteria/Assessment/ Resources
2 Pollination and Growth	I can identify and explain how and why plants are pollinated	<ul style="list-style-type: none"> ● I can explain how plants grow and develop. ● I can make observations on plant growth using germinated seeds. ● I can devise a way to test factors impacting plant growth and development and hypothesize why. ● I can review peer work and construct feedback. ● I can communicate their findings to an audience through various media. ● I can compare and contrast various evolutionary strategies plants use to promote pollination. ● I can identify symbiotic relationships between pollinators and plants. ● I can explain why pollinators are declining ● I can determine the factors that affect pollinator decline ● I can develop a solution to a factor that is contributing to pollinator decline

Unit Title:	
Wide World of Plants	
Relevant Standards: Bold indicates priority	
Planning and Carrying Out Investigations, Constructing Explanations and Designing Solutions	
Essential Question(s):	Enduring Understanding(s):
<ul style="list-style-type: none"> • How do evolutionary connections among plants help us understand their adaptations and survival mechanisms? • What roles do classification systems and anatomical features play in the organization and understanding of the Plantae Kingdom? • How can we use our understanding of plant life cycles, adaptations, and ecosystem roles to promote conservation and raise public awareness? 	<p>Evolution and Adaptation:</p> <ul style="list-style-type: none"> • Plants have evolved diverse characteristics and adaptations that enhance their survival in various environments. By studying evolutionary connections, we can understand how different plants are related and how their specific features help them thrive. <p>Classification and Organization:</p> <ul style="list-style-type: none"> • The classification system within the Plantae Kingdom helps organize the vast diversity of plant life. Understanding this system, along with the anatomical similarities and differences among plants, provides a structured way to study and appreciate plant diversity. <p>Conservation and Ecosystem Roles:</p> <ul style="list-style-type: none"> • Plants play crucial roles in ecosystems, offering numerous services such as oxygen production, habitat provision, and nutrient cycling. Recognizing the life cycles, adaptations, and ecological roles of plants helps highlight the importance of conservation efforts and raises public awareness about the threats plants face and the need for their protection.
Demonstration of Learning:	Pacing for Unit
	11 blocks
Unit-specific Vocabulary:	
Kingdom, Classification, Autotroph, Multicellular, Eukaryotic, Vascular, Non Vascular, Gymnosperms, Angiosperms, Sexual Reproduction, Sporophyte, Gametophyte, Hybridization, Polyploidy, Herbology, Biomes/Ecosystems	
Anticipated misconceptions:	

1. **Misconception:** Plants are simple and uninteresting organisms.
 - **Clarification:** While plants may appear less dynamic than animals, they are incredibly diverse and complex. They have evolved intricate mechanisms for growth, reproduction, and defense. Studying plants reveals their fascinating adaptations and their crucial roles in ecosystems.
2. **Misconception:** All plants serve the same purpose in ecosystems.
 - **Clarification:** Plants have diverse ecological roles, from primary producers to habitat providers, pollinators, and nutrient recyclers. Each plant species has unique traits and functions within its ecosystem, contributing to the overall biodiversity and functioning of the environment.
3. **Misconception:** Plants are entirely separate from animals in terms of evolutionary history.
 - **Clarification:** Plants and animals share a common ancestor and have co-evolved over millions of years. Understanding the evolutionary connections between plants and animals helps us appreciate their shared biological processes and adaptations.
4. **Misconception:** Plants are passive entities that do not respond to their environment.
 - **Clarification:** Plants exhibit sophisticated responses to environmental cues, such as light, water, temperature, and soil nutrients. They can adjust their growth, development, and metabolism to optimize their chances of survival and reproduction. These responses include movements, such as tropisms, and chemical signaling pathways.
5. **Misconception:** Plants are not affected by human activities or environmental changes.
 - **Clarification:** Plants are sensitive to changes in their environment, including pollution, habitat loss, climate change, and invasive species. Human activities have significant impacts on plant populations and ecosystems, leading to biodiversity loss and ecosystem degradation. Understanding these impacts is crucial for effective conservation and sustainable management of plant resources.

Differentiation through *Universal Design for Learning*

UDL Indicator

Action and Expression: Vary the methods for response and navigation

Teacher Actions:

- Provide alternatives in the requirements for rate, timing, speed, and range of motor action required to interact with instructional materials, physical manipulatives, and technologies
- Provide alternatives for physically responding or indicating selections (e.g., alternatives to marking with pen and pencil, alternatives to mouse control)
- Provide alternatives for physically interacting with materials by hand, voice, single switch, joystick, keyboard, or adapted keyboard

Supporting Multilingual/English Learners

Related *CELP standards:*

Learning Targets:

**The CELP guidance is to support the development of language; access to course content expectations should not change as a result of MLL status.*

I can identify the different types of plants by summarizing how the classification system within the Plantae Kingdom (and all the others) works.

An EL can conduct research and evaluate and communicate findings to answer questions or solve problems.

- Level 1: with prompting and support I can gather information to help classify different plants in the plant kingdom.
- Level 2: I can record some data and information that supports the classification system of one plant.
- Level 3: I can paraphrase key information in a flowchart to explain why various plants are members of a specific classification.
- Level 4: I can evaluate the reliability of each source of information that helps to summarize the classification system in the plant kingdom.
- Level 5: I can analyze and integrate information into a clearly organized oral or written text that addresses why and how plants have evolved into what they are today.

Lesson Sequence	Learning Target	Success Criteria/Assessment/ Resources
<p>3 Wide World of Plants</p>	<ul style="list-style-type: none"> ● I can hypothesize how or why the world's scariest plants evolved and match them to more familiar plants to determine evolutionary connections through creation of a model ● I can identify the different types of plants by summarizing how the classification system within the Plantae Kingdom (and all the others) works. 	<ul style="list-style-type: none"> ● I can compare and contrast the anatomical similarities and differences of various organisms found within the Plantae Kingdom by creating a model. ● I can hypothesize how their different characteristics aid in their survival. ● I can discuss the characteristics and organization of the Plantae Kingdom and identify the importance of each tier. ● I can apply my knowledge of new vocabulary to plants found within the local environment ● I can collaborate to construct a visual display of the examples of plants found in the plant kingdom . ● I can compare and contrast different plant species ● I can explain how a plant's structure relates to its function. ● I can devise most creative way to showcase and share my creation with an audience ● I can provide feedback to peers after reviewing each other's projects. ● I can include plants found in initial phenomenon to my handbook ● I can investigate a specific type of plant to identify the stages of its life cycle, adaptations to its environment, and ecosystem services this plant provides. ● I can identify threats to this type of plant due to natural or anthropogenic reasons. ● I can propose a plan to encourage conservation of this type of plant to persuade the public and create awareness. ● I can revise my original model using all of the new learning acquired throughout the unit

Unit Title:	
Plants and Man	
Relevant Standards: Bold indicates priority	
Developing And Using Models; Analyzing And Interpreting Data; Using Mathematical And Computational Thinking, Constructing Explanations And Designing Solutions, Engaging In Argument From Evidence; Obtaining, Evaluating, And Communicating Information	
Essential Question(s):	Enduring Understanding(s):
<ul style="list-style-type: none"> • How have plants shaped human history and society? • What roles do plants play in addressing societal challenges and human well-being? • How can we effectively manage the relationship between plants and society? 	<ul style="list-style-type: none"> • Plants are integral to human history and societal development. • Plants contribute significantly to human well-being and offer solutions to societal challenges. • Effective management of the relationship between plants and society is essential for sustainability.
Demonstration of Learning:	Pacing for Unit
	11 blocks
Unit-specific Vocabulary:	
Impact, Herbology, Phytomedicine, Naturopath, Horticulture, Medicinal, Bryologist, Pteridologist, Forestry, Plant Scientists, Plant Physiology, Extracts, Tincture, Hybridization, GMO, Ethnobotany	
Anticipated misconceptions:	
<ol style="list-style-type: none"> 1. Misconception: Plants are passive organisms that exist solely for human use. <ul style="list-style-type: none"> • Clarification: While plants are often utilized by humans for food, medicine, and various other purposes, they are dynamic organisms with complex interactions and responses to their environment. They play essential roles in ecosystems, contributing to biodiversity, soil health, and ecosystem stability. 2. Misconception: Human activities have only negative impacts on plants and their ecosystems. <ul style="list-style-type: none"> • Clarification: While certain human activities, such as deforestation and pollution, can have detrimental effects on plants and their habitats, humans also play a crucial role in conservation efforts and the sustainable management of plant resources. Additionally, many plants have adapted to thrive in human-altered environments. 3. Misconception: All plants are harmless and beneficial to humans. <ul style="list-style-type: none"> • Clarification: While many plants indeed provide valuable resources such as food, medicine, and oxygen, some plants can be harmful or even toxic to humans and other organisms. Understanding plant toxicity and proper handling is essential for human safety. 4. Misconception: Plants have a limited role in human history and societal development. <ul style="list-style-type: none"> • Clarification: Plants have played a central role in human history and societal development, 	

shaping cultures, economies, and civilizations. From the agricultural revolution to the discovery of medicinal plants, humans have relied on plants for survival and advancement.

5. **Misconception:** Plants are static and unchanging organisms.

- **Clarification:** Plants exhibit a wide range of behaviors and responses to their environment, including growth, reproduction, and defense mechanisms. They can adapt to changing environmental conditions over time through processes such as evolution and acclimatization.

Differentiation through *Universal Design for Learning*

UDL Indicator	Teacher Actions:
<p>Representation: Activate or supply background knowledge</p>	<ul style="list-style-type: none"> ● Anchor instruction by linking to and activating relevant prior knowledge (e.g., using visual imagery, concept anchoring, or concept mastery routines) ● Use advanced organizers (e.g., KWL methods, concept maps) ● Pre-teach critical prerequisite concepts through demonstration or models ● Bridge concepts with relevant analogies and metaphors ● Make explicit cross-curricular connections (e.g., teaching literacy strategies in the social studies classroom)

Supporting Multilingual/English Learners

Related <i>CELP standards:</i>	Learning Targets:
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**The CELP guidance is to support the development of language; access to course content expectations should not change as a result of MLL status.*

I can identify ways plants historically played a central role in the lives and social development of humans

An EL can conduct research and evaluate and communicate findings to answer questions or solve problems.

- Level 1: I can gather information regarding a plant that is important in my life.
- Level 2: I can gather information regarding plants that are important in one of the branches of horticulture.
- Level 3: I can create an oral or written presentation that addresses the importance of plants in society and why it is central to human life.
- Level 4: I can create an oral or written presentation that addresses the ways in which plants have led to the development and enhancement of human life.
- Level 5: I can develop a business that addresses the horticultural benefits of a group of plants and how it supports various branches of society

Lesson Sequence	Learning Target	Success Criteria/Assessment/ Resources
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<p>4 Plants and Man</p>	<p>I can identify ways plants historically played a central role in the lives and social development of humans</p>	<ul style="list-style-type: none"> ● I can analyze and discuss the impact plants have had on the development of societies through historical records ● I can develop a visual representation of how plants have and continue to be apart of horticultural practices ● I can evaluate the impacts of plants in warfare and other detrimental practices ● I can evaluate the role of plants in addressing and finding solutions to nature deficit syndrome ● I can argue and validate the importance of plants in medicine using specific molecular explanations ● I can practice the future role plants will play in medicine by investigating potential plant based therapies ● I can explain how humans increased the efficiency of crops and how it relates to pollinators ● I can investigate the causes and impacts of invasive plants ● I can propose a plan to address one specific invasive plant
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Course Title:	Content Area:	Grade Level:	Credit (if applicable)
Communication Technologies	Engineering and Technology	9-12	0.5

Course Description:

This course will expose students to a wide variety of communications technologies, including graphic, electronic, audio and video communications. The outcome will be an introduction to the terminology, systems and processes used in these fields supported by hands-on activities. Students will also explore careers and social impacts in the rapidly growing communications technology field.

Aligned Core Resources:

Connection to the [*BPS Vision of the Graduate*](#)

**Additional Course Information:
Knowledge/Skill Dependent courses/prerequisites**

Link to [*Completed Equity Audit*](#)

Standard Matrix

Advance CTE Standard	Unit 1	Unit 2	Unit 3	Unit 4
ITPC01.03 Design and employ the use of motion graphics to create visual Web/digital designs. <ul style="list-style-type: none"> Apply principles and elements of design. Create graphical images and videos. Enhance digital communication presentation using a photographic process. Alter digitized images using an image manipulation program. Alter digitized video using a video manipulation program. Demonstrate knowledge of key frames and frames. Demonstrate knowledge of animation techniques. 			X	X
ITPC01.04 Gather and analyze digital communication customer requirements to best meet consumer needs. <ul style="list-style-type: none"> Gather data to identify customer requirements. Determine client's needs and expected outcomes. Collect requirements data from customers and competing Websites. Determine purpose of the digital communication project. Determine the target audience. 	X			
ITPC01.06 Prepare digital communication product specifications to communicate specifications with various audiences. <ul style="list-style-type: none"> Apply principles of design (color theory and schemes, proximity, alignment, repetition, web graphics, optimization, typography). Identify technical constraints Identify and obtain tools and resources to do the job. Identify and evaluate risks. Develop a detailed task list. 		X	X	
ITPC01.07 Demonstrate the effective use of tools for digital communication production, development and project management to complete web/digital communication projects.		X	X	X

<ul style="list-style-type: none"> • Select and use appropriate software tools. • Demonstrate proficiency in the use of digital imaging, digital video techniques, and equipment. • Demonstrate knowledge of available graphics, video, motion graphics, web software programs. 				
<p>ITPC 01.09 Create and implement a digital communication product to meet customer needs.</p> <ul style="list-style-type: none"> • Define the role of individual team members • Develop a conceptual model for the digital communication project • Select the media elements (e.g., sound, video, graphics, text, motion graphics) to be used • Integrate media elements. • Select the publication process to be used • Select the distribution method to be used • Apply principles and elements of design • Apply color theory to select appropriate colors • Create and/or implement the look and feel of the product • Create graphical images and video • Apply knowledge of typography • Enhance digital communication presentation using a photographic process • Alter digitized images using an image manipulation program • Alter digitized video using a video manipulation program • Evaluate visual appeal • Produce or acquire graphics content • Produce or acquire motion graphics content • Produce or acquire audio content • Produce or acquire video content • Integrate the use of photographic special effects into interactive media presentations. • Integrate photographically derived images with hand-drawn graphic images. 	X	X	X	X
<p>ITPC 01.12 Perform maintenance and customer support functions for digital communication products to maintain the delivery of quality products that meet customer needs.</p> <ul style="list-style-type: none"> • Identify maintenance and support requirements. • Define scope of work to meet customer support needs • Provide troubleshooting for digital communication products. • Provide troubleshooting for hardware. • Diagnose problems within the system. 	X	X	X	X
<p>ITPC01.13 Consider intellectual property issues when creating Web pages.</p> <ul style="list-style-type: none"> • Explain the concept of intellectual property. 	X	X	X	X

Unit Links

[Unit 1: Fundamentals of Communication Technologies](#)

[Unit 2: Acoustical Engineering](#)

[Unit 3: Graphic Technologies](#)

[Unit 4: Multimedia Communications](#)

Unit Title:

Unit 1: Fundamentals of Communication Technologies

Relevant Standards: Bold indicates priority

- **ITPC 01.04 Gather and analyze digital communication customer requirements to best meet consumer needs.**
- **ITPC 01.09 Create and implement a digital communication product to meet customer needs.**
- ITPC 01.12 Perform maintenance and customer support functions for digital communication products to maintain the delivery of quality products that meet customer needs.
- ITPC 01.13 Consider intellectual property issues when creating Web pages.

Essential Question(s):

- How are communication and technology linked and how do they mutually evolve together?
- Why is it important to follow all legal regulations regarding communication technologies?

Enduring Understanding(s):

- **Effective Self-Representation:** Students will understand the importance of creating a professional representation of themselves and develop the skills to construct such representations using a combination of textual and graphical elements.
- **Understanding Communication and Technology:** Students will gain a comprehensive understanding of the terms "communication" and "technology," including their definitions, characteristics, and significance in contemporary society. They will recognize the symbiotic relationship between communication and technology and their roles in shaping human interactions and experiences.
- **Technological Literacy:** Students will be able to identify various tools, artifacts, and ideas that fall under the category of technology. They will develop technological literacy by recognizing the diverse forms and functions of technology in everyday life, from simple tools to complex systems.
- **Historical Perspective:** Students will explore the evolution of communication technology throughout history by researching and presenting key elements in a communication technology timeline. They will analyze the importance of these elements in advancing human communication and their impact on the development of societies and cultures.
- **Critical Analysis of Legal and Ethical Implications:** Students will critically analyze situations involving the creation or utilization of communication technologies to identify potential legal and ethical implications. They will develop the ability to assess the ethical considerations and legal frameworks surrounding communication technologies and make informed decisions or recommendations based on their analysis.
- **Media Literacy:** Students will engage in discussions and reflections on the ethical considerations of

	filming or not filming in various contexts. They will develop media literacy skills by considering factors such as consent, privacy, representation, and the potential consequences of filming or refraining from filming in different situations.
Demonstration of Learning:	Pacing for Unit
Projects, Written Response, Oral Presentation	8 block classes
Unit-specific Vocabulary:	Aligned Unit Materials, Resources, and Technology (beyond core resources):
Career, Collaboration, Communication, Copyright, Ethics, Hardware, Media (content), Media (press), Release, Royalties, Software, Technology, Video.	
Opportunities for Interdisciplinary Connections:	Anticipated misconceptions:
History: Interdependence of civilization progression and technological progression.	<ul style="list-style-type: none"> • Technology in too broad of sense: anything that solves a problem. • Technology in too narrow of a sense: computers or only new things
Connections to Prior Units:	Connections to Future Units:
N/A	Core understanding of the interconnectivity of technology, how humans communicate using technology, and the impact communication technology has on society.
Differentiation through Universal Design for Learning	
UDL Indicator	Teacher Actions:
Recruiting Interest: Optimize relevance, value, and authenticity (7.2)	<ul style="list-style-type: none"> • Vary activities and sources of information so that they can be: <ul style="list-style-type: none"> ○ Personalized and contextualized to learners' lives ○ Culturally relevant and responsive ○ Socially relevant ○ Age and ability appropriate ○ Appropriate for different racial, cultural, ethnic, and gender groups • Design activities so that learning outcomes are authentic, communicate to real audiences, and reflect a purpose that is clear to the participants • Provide tasks that allow for active participation, exploration and experimentation • Invite personal response, evaluation and self-reflection to content and activities • Include activities that foster the use of imagination to solve novel and relevant problems, or make sense of

complex ideas in creative ways

Supporting Multilingual/English Learners

Related **CELP standards:**

Learning Targets:

An EL can construct meaning from oral presentations and literary and informational text through grade appropriate listening, reading, and viewing.

I can create a professional representation of myself within criteria and constraints using both text and graphical elements.

- Level 1: With prompting and supports, an EL can
 - Identify a few key words and phrases related to creating a professional representation of oneself.
 - Recognize basic text and graphical elements used in examples provided.
 - Follow simple criteria and constraints when creating a professional representation.
- Level 2: With prompting and supports, an EL can
 - Identify the main topic of creating a professional representation of oneself.
 - Recall a few key details about criteria and constraints for the representation.
 - Explain basic details about how text and graphical elements contribute to the representation.
- Level 3: With guidance and supports, an EL can
 - Determine the central idea of creating a professional representation of oneself within criteria and constraints.
 - Explain how specific text and graphical elements are used to develop the representation.
 - Summarize some aspects of the criteria and constraints for the representation.
- Level 4: An EL can
 - Identify two central ideas or themes related to creating a professional representation of oneself.
 - Analyze how the use of text and graphical elements contributes to the development of these themes.
 - Provide specific details and evidence from examples to support the analysis.
 - Summarize key aspects of the criteria and constraints for the representation.
- Level 5: An EL can
 - Determine central ideas or themes in creating a professional representation of oneself within criteria and constraints.
 - Cite specific details and evidence from examples to support the analysis comprehensively.
 - Provide a comprehensive summary of the criteria and constraints for the representation.

Lesson Sequence	Learning Target	Success Criteria/Assessment/Resources
1-2	I can communicate aspects of myself by creating an example of communication technology within specific criteria and constraints.	<ul style="list-style-type: none">● I can create a professional representation of myself within criteria and constraints using both text and graphical elements.
2-6	I can define and provide examples of communication technologies as they evolved through human history.	<ul style="list-style-type: none">● I can define the terms communication and technology.● I can identify what tools, artifacts, and ideas are considered technological.● I can research and present three elements in the communication technology timeline and explain their importance in the evolution of human existence.
7-8	I can apply concepts of law, copyrights, and ethics to the creation, use, and distribution of digital media.	<ul style="list-style-type: none">● I can analyze situations where communication technologies are being created or utilized to determine the legal or ethical implications.● <input type="checkbox"/> To film or not to Film?

Unit Title:	
Unit 2: Acoustical Engineering	
Relevant Standards: Bold indicates priority	
<ul style="list-style-type: none"> ● ITPC 01.03 Design and employ the use of motion graphics to create visual Web/digital designs. ● ITPC01.06 Prepare digital communication product specifications to communicate specifications with various audiences. ● ITPC01.07 Demonstrate the effective use of tools for digital communication production, development and project management to complete web/digital communication projects. ● ITPC 01.09 Create and implement a digital communication product to meet customer needs. ● ITPC 01.12 Perform maintenance and customer support functions for digital communication products to maintain the delivery of quality products that meet customer needs. ● ITPC01.13 Consider intellectual property issues when creating Web pages. 	
Essential Question(s):	Enduring Understanding(s):
<ul style="list-style-type: none"> ● What is the significance of safety within communication technology? ● What must you consider when planning to record or playback audio? 	<ul style="list-style-type: none"> ● Audio recording requires careful planning and execution in order to be effective. ● Safety protocols are essential in the operation, transportation, and storage of audio equipment to prevent accidents and ensure the well-being of individuals. ● Planning recordings involves evaluating various audio considerations specific to different locations, such as acoustics and ambient noise, to achieve desired recording outcomes. ● Live sound reinforcement requires configuring audio equipment effectively to ensure optimal sound quality and coverage in a given venue or setting. ● Audio content creation involves recording and manipulating audio using diverse platforms, enabling creative expression and communication of ideas. ● Acoustical engineering plays a significant role in shaping environments and technologies, influencing societal experiences and interactions with sound. ● Understanding the Fair Use Act of 1976 is crucial for educators and creators to navigate copyright laws responsibly and ethically in educational settings.
Demonstration of Learning:	Pacing for Unit
<ul style="list-style-type: none"> ● Practical evaluation of competency of cable safety fundamentals. ● Public Address system configuration and operation activities. ● Hands on recording activities to demonstrate audio competencies. 	8 classes
Unit-specific Vocabulary:	Aligned Unit Materials, Resources, and Technology (beyond core resources):

Amplifier, Amp, Channel (editing), Channel (mixer), Decibel, Equalizer, Gain, Gauge, Level, Mixer, Ohm, Patch Cable, Sound reinforcement, TR(R)S, Trim, Volt, Wave, XLR	
Opportunities for Interdisciplinary Connections:	Anticipated misconceptions:
Physics / Principles of Engineering: Ohm's law / Power	<ul style="list-style-type: none"> Gain and level are the same thing because they make the sound louder or softer. There is such singular thing as an “aux” cable.
Connections to Prior Units:	Connections to Future Units:
<ul style="list-style-type: none"> How does acoustical engineering impact society? How The Fair Use Act of 1976 applies to education and copyright. 	<ul style="list-style-type: none"> How does acoustical engineering contribute to a greater message?
Differentiation through Universal Design for Learning	
UDL Indicator	Teacher Actions:
Recruiting Interest: Optimize individual choice and autonomy	<ul style="list-style-type: none"> Provide learners with as much discretion and autonomy as possible by providing choices in such things as: the context or content used for practicing and assessing skills.
Language and symbols: Clarify vocabulary and structure	<ul style="list-style-type: none"> Pre-teach vocabulary and symbols, especially in ways that promote connection to the learners’ experience and prior knowledge.
Supporting Multilingual/English Learners	
Related CELP standards:	Learning Targets:
<p>An EL can determine the meaning of words and phrases in oral presentations and literary and informational text.</p> <p>I can evaluate the audio considerations required for various locations when planning a recording.</p> <ul style="list-style-type: none"> Level 1: With prompting and supports, an EL can <ul style="list-style-type: none"> Identify a few key words and phrases related to audio considerations for recording. Recognize basic terms and concepts used in discussions about recording locations. Follow simple instructions regarding audio planning for different locations. Level 2: With prompting and supports, an EL can <ul style="list-style-type: none"> Identify the main topic of audio considerations for recording in various locations. Recall a few key details about factors to consider when planning a recording. Explain basic details about how specific considerations support the overall recording process. Level 3: With guidance and supports, an EL can <ul style="list-style-type: none"> Determine the central idea of audio considerations for recording in different locations. Explain how specific details about recording locations contribute to the overall recording quality. Summarize some aspects of the text or presentation related to planning a recording. Level 4: An EL can <ul style="list-style-type: none"> Cite specific details and evidence from examples to support the analysis of audio planning. Summarize key factors to consider when planning a recording in different locations. Level 5: An EL can <ul style="list-style-type: none"> Cite specific details and evidence comprehensively to support the analysis of audio planning. 	

- Provide a comprehensive summary of factors to consider when planning recordings in various locations.

Lesson Sequence	Learning Target	Success Criteria/Assessment/Resources
1-3	<ul style="list-style-type: none"> ● I can apply fundamentals of cable safety while operating, transporting, and storing various audio components ● I can evaluate the audio considerations required for various locations when planning a recording. ● I can configure equipment required for live sound reinforcement. 	<ul style="list-style-type: none"> ● I can uncoil and recoil a cable of 100' in length as demonstrated by the instructor. ● I can inspect a location and identify the equipment needed for acoustical reinforcement or recording. ● I can set up a basic sound board which combines multiple sources to powered speakers.
4-8	<ul style="list-style-type: none"> ● I can record and manipulate audio content (original and previously produced) using various forms of audio platforms. 	<ul style="list-style-type: none"> ● I can record my own audio clips ● I can legally acquire professional audio samples. ● I can combine audio clips into a final project.

Unit Title:

Unit 3: Graphic Technologies

Relevant Standards: Bold indicates priority

- ITPC 01.03 Design and employ the use of motion graphics to create visual Web/digital designs.
- ITPC 01.06 Prepare digital communication product specifications to communicate specifications with various audiences.
- **ITPC 01.07 Demonstrate the effective use of tools for digital communication production, development and project management to complete web/digital communication projects.**
- ITPC 01.09 Create and implement a digital communication product to meet customer needs.
- ITPC 01.12 Perform maintenance and customer support functions for digital communication products to maintain the delivery of quality products that meet customer needs.
- ITPC 01.13 Consider intellectual property issues when creating Web pages.

Essential Question(s):

- Why is it important that the camera operator be able to control the settings manually of cameras?
- Why is it important to plan all camera movements?

Enduring Understanding(s):

- Careful camera movements and manual settings create professional quality videos.
- Mastery of manual camera configuration enables photographers to create professional-quality images tailored to specific artistic or technical requirements.
- Proper camera preparation is essential for ensuring optimal functionality and performance during shooting sessions, enhancing efficiency and reliability.
- Selection of appropriate aperture, shutter speed, and ISO settings is critical for achieving desired exposure, depth of field, and image clarity in photography.
- Effective camera positioning is fundamental to capturing high-quality images by optimizing composition, perspective, and framing to convey desired visual messages.
- Proficiency in digital image manipulation empowers creators to enhance, modify, or transform photographs to fulfill diverse creative or client needs using software tools.
- Media management skills are necessary for organizing, storing, and importing multimedia assets efficiently, facilitating smooth project workflows and collaboration.
- Understanding the difference between vector and pixel-based images enables informed decision-making regarding image formats and applications across various contexts.
- Competence in producing or acquiring graphics content for vector-based images allows for the creation of scalable, resolution-independent artwork suitable for diverse media.
- Utilization of basic geometric shapes and vector manipulation techniques facilitates the recreation and modification of images with precision and

	<p>flexibility in vector-based graphics.</p> <ul style="list-style-type: none"> • Planning camera movements is essential to ensure smooth transitions, visual coherence, and narrative continuity in cinematography, enhancing storytelling and audience engagement.
Demonstration of Learning:	Pacing for Unit
<ul style="list-style-type: none"> • Graphic organizers regarding the classroom discussion on camera settings. • Short photography projects to demonstrate understanding of camera fundamentals. • Short projects to master camera stabilization techniques. 	13 Classes
Unit-specific Vocabulary:	Aligned Unit Materials, Resources, and Technology (beyond core resources):
Aperture, Camera Body, Exposure, Fill, Focus, Gimbal, ISO, Lens, Node, Path, Pixel, Shutter Speed, Stroke, Vector, White Balance	Manually controllable cameras (i.e. DSLR, mirrorless, etc), Adobe Creative Cloud (Photoshop) or comparable software
Opportunities for Interdisciplinary Connections:	Anticipated misconceptions:
<ul style="list-style-type: none"> • Connection to many courses which provide video creation as an opportunity to demonstrate learning. 	<ul style="list-style-type: none"> • Modern cameras and camera phones are so good you can just put it in auto and press the shutter button for a professional grade photo.
Connections to Prior Units:	Connections to Future Units:
<ul style="list-style-type: none"> • Creating a project to meet customer needs is the same regardless of the specific media used. 	<ul style="list-style-type: none"> • Modern photography and videography are virtually identical as cameras have evolved.
Differentiation through <i>Universal Design for Learning</i>	
UDL Indicator	Teacher Actions:
Expression & Communication: Use multiple media for communication	<ul style="list-style-type: none"> • Compose in multiple media such as text, speech, drawing, illustration, comics, storyboards, design, film, music, dance/movement, visual art, sculpture, or video • Solve problems using a variety of strategies
Supporting Multilingual/English Learners	
Related <i>CELP standards:</i>	Learning Targets:
<p>An EL can determine the meaning of words and phrases in oral presentations and literary and informational text.</p> <p>I can explain the difference between vector and pixel based images.</p> <ul style="list-style-type: none"> • Level 1: With prompting and supports, an EL can <ul style="list-style-type: none"> ◦ Identify a few key words and phrases related to vector and pixel-based images. ◦ Recognize basic terms used in discussions about image types. ◦ Follow simple explanations about the difference between vector and pixel-based images. • Level 2: With prompting and supports, an EL can <ul style="list-style-type: none"> ◦ Identify the main topic of vector and pixel-based images. 	

- Recall a few key details about characteristics of vector and pixel-based images.
- Explain basic details about how specific characteristics support the main topic.
- Level 3: With guidance and supports, an EL can
 - Determine the central idea of the difference between vector and pixel-based images.
 - Explain how specific details about image types contribute to the overall understanding.
 - Summarize some aspects of the text or presentation related to vector and pixel-based images.
- Level 4: An EL can
 - Cite specific details and evidence from examples to support the analysis of image characteristics.
 - Summarize key differences between vector and pixel-based images.
- Level 5: An EL can
 - Cite specific details and evidence comprehensively to support the analysis of image characteristics.
 - Provide a comprehensive summary of the differences between vector and pixel-based images.

Lesson Sequence	Learning Target	Success Criteria/Assessment/Resources
1-3	<ul style="list-style-type: none"> ● I can manually configure a camera to create a professional image. 	<ul style="list-style-type: none"> ● I can prepare a camera for use. ● I can select the correct aperture, shutter speed, and ISO for a shot. ● I can position the camera for a high quality image.
4-6	<ul style="list-style-type: none"> ● I can alter digital images using a photo manipulation program. 	<ul style="list-style-type: none"> ● I can gather, store, and import media for a project. ● I can enhance or change a photo to meet the needs of a customer using software.
7-13	<ul style="list-style-type: none"> ● I can produce or acquire graphics content for vector based images. 	<ul style="list-style-type: none"> ● I can explain the difference between vector and pixel based images. ● I can use basic geometric shapes to recreate images using vectors. ● I can modify and manipulate nodes and paths to create vector based artwork.

Unit Title:	
Unit 4: Multimedia Communications	
Relevant Standards: Bold indicates priority	
<ul style="list-style-type: none"> • ITPC01.07 Demonstrate the effective use of tools for digital communication production, development and project management to complete web/digital communication projects. • ITPC 01.09 Create and implement a digital communication product to meet customer needs. • ITPC 01.12 Perform maintenance and customer support functions for digital communication products to maintain the delivery of quality products that meet customer needs. • ITPC01.13 Consider intellectual property issues when creating Web pages. 	
Essential Question(s):	Enduring Understanding(s):
<ul style="list-style-type: none"> • Why is it important to clearly identify your audience? • Why is it important to manage equipment and files carefully? 	<p>Proper Equipment Handling:</p> <ul style="list-style-type: none"> • Understanding the correct usage, transportation, and storage of equipment is essential for effective media production. • Proper handling of equipment ensures functionality, longevity, and safety during use. <p>Digital Content Management:</p> <ul style="list-style-type: none"> • Managing digital content involves storing, locating, and transferring files efficiently to maintain organization and accessibility. • Effective digital content management facilitates seamless workflow and collaboration in media production projects. <p>Audience Identification and Media Purpose:</p> <ul style="list-style-type: none"> • Identifying the target audience is crucial for tailoring media content to meet their specific needs, interests, and preferences. • Articulating the purpose of media relative to the audience ensures content relevance, engagement, and effectiveness. <p>Creating Effective Media:</p> <ul style="list-style-type: none"> • Creating media specific to the audience involves employing strategies and techniques to capture their attention, evoke emotions, and convey intended messages effectively. • Effective media creation requires careful planning, execution, and evaluation to achieve desired outcomes and impact. <p>Equipment and File Management Importance:</p> <ul style="list-style-type: none"> • Careful management of equipment and files is essential to avoid damage, loss, or misplacement, which can disrupt production processes and hinder project completion. • Proper equipment and file management contribute to efficiency, productivity, and professionalism in media production endeavors.
Demonstration of Learning:	Pacing for Unit

<ul style="list-style-type: none"> • In class practical activities involving digital file media management. • Equipment setup, transportation, operation, and storage activities. • Multimedia project. 	8 classes
Unit-specific Vocabulary:	
Audience, Cloud, Export, Hard drive, Image, Import, Jpeg, Media, Mov, Mp3, Mp4, Multimedia, Offline, Online, Png, Render, Track.	
Opportunities for Interdisciplinary Connections:	Anticipated misconceptions:
Enter into agreement with another course to create a multimedia product to meet their classroom needs.	Physical equipment and digital media aren't worth the time to manage correctly.
Connections to Prior Units:	Connections to Future Units:
All prior skills can be utilized and synthesized into multimedia presentations.	
Differentiation through Universal Design for Learning	
UDL Indicator	Teacher Actions:
<ul style="list-style-type: none"> • Perception: Offer ways of customizing the display of information 	<ul style="list-style-type: none"> • Display information in a flexible format so that the following perceptual features can be varied: <ul style="list-style-type: none"> ○ The size of text, images, graphs, tables, or other visual content ○ The contrast between background and text or image ○ The color used for information or emphasis ○ The volume or rate of speech or sound ○ The speed or timing of video, animation, sound, simulations, etc. ○ The layout of visual or other elements ○ The font used for print materials
Supporting Multilingual/English Learners	
Related CFLP standards:	Learning Targets:
<p>An EL can . . .participate in grade appropriate oral and written exchanges of information, ideas, and analyses, responding to peer, audience, or reader comments and questions.</p> <p>I can articulate the purpose of my media relative to my audience.</p> <ul style="list-style-type: none"> • Level 1: With prompting and supports, an EL can <ul style="list-style-type: none"> ○ Actively listen to others and participate in short conversational or written exchanges on familiar topics. ○ Use basic vocabulary to present information about the purpose of media relative to the audience. ○ Respond verbally or nonverbally to simple questions about the topic. • Level 2: With prompting and supports, an EL can <ul style="list-style-type: none"> ○ Actively listen to others and participate in short conversational or written exchanges on familiar topics and texts. ○ Use emerging vocabulary to present information and ideas about the purpose of media relative to the audience. ○ Respond to simple questions and provide basic explanations. 	

- Level 3: With guidance and supports, an EL can
 - Participate in conversations, discussions, and written exchanges on familiar topics, texts, and issues.
 - Use developing vocabulary to express personal ideas about the purpose of media relative to the audience.
 - Ask and answer relevant questions, and provide additional information and evidence.
 - Restate some key ideas expressed.
- Level 4: An EL can
 - Participate in conversations, discussions, and written exchanges on a range of topics, texts, and issues.
 - Use clear language to express personal ideas about the purpose of media relative to the audience, supporting points with specific evidence.
 - Ask and answer questions to clarify ideas and conclusions, and summarize key points expressed.
- Level 5: An EL can
 - Participate in extended conversations, discussions, and written exchanges on a range of substantive topics, texts, and issues.
 - Use persuasive language to express personal ideas clearly about the purpose of media relative to the audience, referring to specific evidence to support ideas.
 - Ask and answer questions that probe reasoning and claims, and summarize key points and evidence discussed effectively.

Lesson Sequence	Learning Target	Success Criteria/Assessment/Resources
1-2	<ul style="list-style-type: none"> ● I can use equipment properly. 	<ul style="list-style-type: none"> ● I can transport equipment properly. ● I can store equipment properly. ● I can use equipment properly.
3	<ul style="list-style-type: none"> ● I can manage digital content. 	<ul style="list-style-type: none"> ● I can store digital content on my computer. ● I can locate digital content on my computer. ● I can transfer digital content from one location to another.
4-7	<ul style="list-style-type: none"> ● I can create effective media. 	<ul style="list-style-type: none"> ● I can identify my target audience. ● I can articulate the purpose of my media relative to my audience. ● I can create media specific to my audience.

Course Title:	Content Area:	Grade Level:	Credit (if applicable)
CAD and Solid Modeling	CTE: Engineering and Technical Sciences	9-12	0.5

Course Description:

This advanced course will further advanced students skills and knowledge of computer aided design (CAD). Advanced tools and modeling concepts will be applied to create complex mechanical parts. Modeling techniques and methods will be explored to find the most efficient approach to designing and manufacturing a part(s). Students will apply a design process through a variety of “hands on” projects. Mechanical parts will be created both virtually in CAD and then physically utilizing several manufacturing processes (3D printing, Laser Cutting, and CNC milling).

Aligned Core Resources:

Connection to the *BPS Vision of the Graduate*

- CRITICAL THINKING AND PROBLEM SOLVING
- Collect, assess and analyze relevant information
 - Reason effectively. Use systems thinking
 - Make sound judgments and decisions. Identify, define and solve authentic problems and essential questions.
 - Reflect critically on learning experience, processes and solutions
 - Transfer knowledge to other situations

**Additional Course Information:
Knowledge/Skill Dependent courses/prerequisites**

Link to *Completed Equity Audit*

Standard Matrix

Advance CTE Standard	Unit 1	Unit 2
ESS01.03: Demonstrate mathematics knowledge and skills required to pursue the full range of post-secondary education and career Opportunities. <ul style="list-style-type: none"> • Apply data and measurements to solve a problem. 	X	X
ESS02.01: Select and employ appropriate reading and communication Select and employ appropriate reading and communication strategies to learn and use technical concepts and vocabulary in practice. <ul style="list-style-type: none"> • Demonstrate use of content, technical concepts and vocabulary when analyzing information and following directions. • Interpret information, data, and observations to apply information learned from reading to actual practice. • Transcribe information, data, and observations to apply information learned from reading to actual practice. • Communicate information, data, and observations to apply information learned 	X	X

from reading to actual practice		
ESS02.02 Demonstrate use of the concepts, strategies, and systems for obtaining and conveying ideas and information to enhance communication in the workplace. <ul style="list-style-type: none"> Record information needed to present a report on a given topic or problem. 		X
ESS02.03 Locate, organize and reference written information from various sources to communicate with co-workers and clients/participants. <ul style="list-style-type: none"> Organize information to use in written and oral communications. 		X
ESS02.04 Evaluate and use information resources to accomplish specific occupational tasks. <ul style="list-style-type: none"> Use informational texts, Internet web sites, and/or technical materials to review and apply information sources for occupational tasks. 		X
ESS02.06 Develop and deliver formal and informal presentations using appropriate media to engage and inform audiences.		X
ESS02.09 Develop and interpret tables, charts, and figures to support written and oral communications. <ul style="list-style-type: none"> Interpret tables, charts, and figures used to support written and oral communication. 		X
ESS03.01 Employ critical thinking skills independently and in teams to solve problems and make decisions (e.g., analyze, synthesize and evaluate). <ul style="list-style-type: none"> Analyze elements of a problem to develop creative solutions. Use structured problem-solving methods when developing proposals and solutions. Critically analyze information to determine value to the problem-solving task. 	X	X
ESS03.04 Conduct technical research to gather information necessary for decision-making. <ul style="list-style-type: none"> Gather technical information and data using a variety of resources. 	X	X
ESS04.10 Employ computer operations applications to manage work tasks. <ul style="list-style-type: none"> Manage computer computer operations. Manage file storage. Compress or alter files. 	X	X
ESS04.11 Use computer-based equipment (containing embedded computers or processors) to control devices. <ul style="list-style-type: none"> Operate computer driven equipment and machines. Use installation and operation manuals Troubleshoot computer driven equipment and machines Access support as needed to maintain operation of computer driven equipment and machines 	X	X
Implement quality control systems and practices to ensure quality products and services. <ul style="list-style-type: none"> Describe quality control standards and practices common to the workplace. 		X
MNC10.01 Describe and employ technical skills and knowledge required for careers in manufacturing in order to perform basic workplace activities common to manufacturing activities common to manufacturing. <ul style="list-style-type: none"> Demonstrate the planning and layout processes (e.g., designing, print reading, measuring) used in manufacturing. 		X

<ul style="list-style-type: none"> Summarize how materials can be processed using tools and machines. Describe various types of assembling processes (e.g. mechanical fastening, mechanical force, joining, fusion bonding, adhesive bonding) used in manufacturing. Explain finishing processes (e.g., types of finishing materials, surface preparation, methods of application) used in manufacturing. Explain the processes of inspection and quality control used in manufacturing. 		
<p>MNPB04.01 Employ production process audits and inspections to maintain quality and encourage continuous improvement.</p> <ul style="list-style-type: none"> Check calibration of gauges and other data collection equipment. 		X
<p>MNPB05.01 Communicate with co-workers and/or external customers to ensure production meets business requirements.</p> <ul style="list-style-type: none"> Communicate material specifications and delivery schedules in a timely and accurate manner. 		X
<p>ACC01.01 Perform math operations such as estimating and distributing materials and supplies to complete jobsite/workplace tasks.</p> <ul style="list-style-type: none"> Use basic math functions to complete jobsite/workplace tasks. Use geometric formulas to determine areas and volumes of various structures. Use appropriate formulas to determine ratios, fractions, and proportion measures. Use appropriate formulas to determine measurements of dimensions, spaces and structures. Conceptualize a three-dimensional form from a two-dimensional drawing to visualize proposed work. 	X	X
<p>ACC03.02 Evaluate and adjust design and construction project plans and schedules to respond to unexpected events and conditions.</p> <ul style="list-style-type: none"> Identify and assess critical situations as they arise to resolve issues. 		X
<p>ACC10.01 Read, interpret, and use technical drawings, documents, and specifications to plan a project.</p> <ul style="list-style-type: none"> Interpret drawings used in project planning. Recognize how specifications and standards are arranged for proper access. Use the architect's plan, manufacturer's illustrations and other materials to communicate specific data and visualize proposed work. 	X	X
<p>ACPA06.02 Employ appropriate representational media to communicate concepts and design.</p> <ul style="list-style-type: none"> Convey graphic information using multi-dimensional drawings. Build models using referenced drawings and sketches. Utilize computer technology when communicating concepts and designs. 		X
<p>SCC06.01 Apply safety practices in the environment where science, technology, engineering, and/or mathematical principles are appropriate to ensure a safe workplace.</p> <ul style="list-style-type: none"> Apply appropriate safety and health practices when developing plans, projects, processes, or solving complex problems. Use appropriate safety techniques, equipment, and processes in planning and /or project applications. 		X

Unit Links

[Fusion 360 and MFG Overview](#)

[Manufacturing Strategies utilizing Fusion 360 applications](#)

Unit Title:

Fusion 360 and MFG Overview

Unit Summary and Relevant Standards: Bold indicates priority

In this unit, students will explore, learn, and utilize several design tools within Autodesk Fusion360 software to produce high-quality, complex, and precise part models. In addition, students will utilize the different design setups to virtually examine the manufacturing of their parts, to help make corrections and informed decisions on the manufacturing process being utilized.

Essential Question(s):

- What are the core differences between CAD and CAM, and how do they complement each other in the design and manufacturing process?
- How do you create and manipulate a design using Fusion360, from initial sketch to finalized part?
- What steps are involved in creating a manufacturing file using Fusion360, and how do you ensure the proper setup and settings for the chosen manufacturing process?

Enduring Understanding(s):**Understanding the Design-to-Manufacturing Process:**

- Students will understand the sequential process from conceptualizing a design to manufacturing a physical part, involving both CAD and CAM.
- They will comprehend how CAD is used for designing digital models, while CAM is utilized for generating instructions for manufacturing machines.
- Students will grasp the relationship between CAD and CAM, recognizing how they work together to streamline the production process.

Proficiency in Fusion360:

- Students will be proficient in using Fusion360 for both design and manufacturing purposes.
- They will understand how to initiate a design, select appropriate templates, and manipulate sketches to create 3D models.
- They will be able to use a variety of sketch and modeling tools within Fusion360 to add features and depth to their designs.

Applying Manufacturing Principles:

- Students will understand the principles behind manufacturing setups and processes.
- They will know how to create manufacturing setups in Fusion360 and select appropriate processes for a given part.
- They will be able to adjust manufacturing settings based on the chosen process to optimize production.

Integration of Design and Manufacturing:

- Students will understand the importance of integrating design and manufacturing considerations throughout the process.
- They will recognize how design decisions impact manufacturability and vice versa.
- They will be able to make informed design choices that take into account manufacturing constraints and requirements.

Problem-Solving and Adaptability:

- Students will develop problem-solving skills and

	<p>adaptability in using CAD/CAM software.</p> <ul style="list-style-type: none"> • They will be able to troubleshoot issues that arise during the design or manufacturing process. • They will understand the importance of flexibility in adjusting designs or manufacturing setups based on feedback or changing requirements.
Demonstration of Learning:	Pacing for Unit
Part and Process Setup within Fusion360	8 Weeks
Unit-specific Vocabulary:	Aligned Unit Materials, Resources, and Technology (beyond core resources):
2d Contour, 3d Modeling Tool, Adaptive Clearing, Axis, Baseline, Cad (Computer-Aided Design), Cam (Computer-Aided Manufacturing), Chamfer, Cutting, Design File, Clearance Height, Extrude, Feeds And Speeds, Fillet, Fusion360, Lead In/Out, Manufacturing File, Manufacturing Process, Manufacturing Setup, Navigation Bar, Orientation, Ramping, Rapid Movement Revolve, Shell, Sketch, Sketch Plane, Stock, Toolpath, View Cube, 3d Modeling.	Autodesk Fusion360
Differentiation through Universal Design for Learning	
UDL Indicator	Teacher Actions:
Expression and Communication: Use multiple tools for construction and composition; Build fluencies with graduated levels of support for practice and performance	<ul style="list-style-type: none"> • Provide appropriate Computer-Aided-Design (CAD) and Computer Aided Manufacturing (CAM) related scaffolding that can be gradually released with increasing independence and skills • Use web applications (e.g., wikis, animation, presentation) • Provide differentiated models to emulate (i.e. models that demonstrate the same outcomes but use differing approaches, strategies, skills, etc.) • Provide differentiated feedback (e.g., feedback that is accessible because it can be customized to individual learners) • Provide multiple examples of novel solutions to authentic problems
Supporting Multilingual/English Learners	
Related CELP standards:	Learning Targets:
<p>An EL can . . . participate in grade appropriate oral and written exchanges of information, ideas, and analyses, responding to peer, audience, or reader comments and questions.</p> <p>I can create a manufacturing file using Fusion360.</p> <p>Level 1: With prompting and support, use a very limited set of strategies to:</p> <ul style="list-style-type: none"> • Follow basic instructions to create a manufacturing file using Fusion360 • Use simple vocabulary to describe the steps involved in creating a manufacturing file • Respond to yes/no questions and some basic questions about creating a manufacturing file <p>Level 2: With prompting and support, use an emerging set of strategies to:</p>	

- Follow instructions to create a manufacturing file using Fusion360
 - Participate in short exchanges about creating manufacturing files using academic and domain-specific vocabulary
 - Respond to simple questions about the process of creating a manufacturing file
- Level 3: With guidance and support, use a developing set of strategies to:
- Discuss and ask questions about creating manufacturing files using Fusion360
 - Use academic and domain-specific vocabulary to describe the steps involved in creating a manufacturing file
 - Add relevant information and evidence to discussions about creating manufacturing files
 - Restate key ideas about creating manufacturing files expressed by others
- Level 4: Use an increasing range of strategies to:
- Engage in discussions and written exchanges about creating manufacturing files on various topics and issues using academic and domain-specific vocabulary
 - Build on the ideas of others regarding creating manufacturing files
 - Clearly express own ideas about creating manufacturing files with specific evidence
 - Ask and answer questions to clarify steps and concepts related to creating manufacturing files
 - Summarize key points discussed about creating manufacturing files
- Level 5: Use a wide range of strategies to:
- Participate in extended discussions and written exchanges about creating manufacturing files on substantive topics and issues using academic and domain-specific vocabulary
 - Build on the ideas of others to deepen discussions about creating manufacturing files
 - Clearly and persuasively express own ideas about creating manufacturing files with specific and relevant evidence
 - Refer to specific evidence from texts or research to support ideas about creating manufacturing files
 - Ask and answer questions that probe reasoning and claims related to creating manufacturing files
 - Summarize key points and evidence discussed about creating manufacturing files

Lesson Sequence	Learning Target	Success Criteria/Assessment/Resources
1 CAD vs CAM	I can explain the difference between Computer Aided Design (CAD) and Computer Manufacturing Design (CAM).	<ul style="list-style-type: none"> ● I can explain what CAD is and how it can be used. ● I can explain what CAM is and how it can be used. ● I can explain the difference between CAD and CAM
2 Fusion Design File	I can create a design file using Fusion360.	<ul style="list-style-type: none"> ● I can pick the appropriate template within Fusion360 to create a part. ● I can select the appropriate sketch plane (XY); (YZ); (XZ) to initiate part creation. ● I can utilize the view cube and navigation bar to adjust part orientation. ● I can utilize the appropriate sketch tools (i.e. line, rectangle, offset, trim, etc). ● I can finalize a sketch.
3 Depth to Drawings	I can use 3D modeling tools to create depth within a sketch	<ul style="list-style-type: none"> ● I can utilize the appropriate 3D modeling tools (i.e extrude, revolve, shell, fillet, chamfer etc) to add applicable features to the part.
4 Manufacturing File	I can create a manufacturing file using Fusion360	<ul style="list-style-type: none"> ● I can create a new manufacturing setup ● I can select the proper manufacturing process ● I can change and adjust manufacturing settings based on the chosen manufacturing process

Unit Title:

Manufacturing Strategies utilizing Fusion 360 applications

Unit Summary and Relevant Standards: Bold indicates priority

The second unit introduces students to the principles of part design utilizing Fusion 360 CAD software based on ideas, needs or design constraints. Students will learn how to implement the steps of the design process for transforming ideas into a production part. The creation of assemblies will be covered for design solutions which require the marriage of multiple parts. For existing parts which may need to be created or modified, the use of reverse engineering will give students the opportunity to recreate or improve on existing designs. Students will use additive or subtractive manufacturing processes to create a part or parts needed for an assembly.

Essential Question(s):

- How does the design process facilitate the transformation of an idea into a solution, and what are the key steps involved?
- What are the differences between additive and subtractive manufacturing, and how do they influence the design and production of parts?
- How can Fusion 360 be utilized to create files for different manufacturing processes, such as 3D printing, laser cutting, and CNC machining?

Enduring Understanding(s):**Design Process and Problem-Solving:**

- Students will understand the iterative nature of the design process, recognizing that it involves identifying problems, generating ideas, and refining solutions.
- They will comprehend the steps of the design process, including ideation, research, prototyping, and evaluation, and be able to apply each step to create effective design solutions.
- They will develop problem-solving skills by systematically applying the design process to address real-world challenges.
- **Manufacturing Methods and Their Implications:**
- Students will understand the differences between additive and subtractive manufacturing.
- They will recognize that additive manufacturing builds parts layer by layer, while subtractive manufacturing removes material from a solid block.
- They will be able to evaluate the benefits and drawbacks of each manufacturing method in terms of cost, speed, complexity, and material usage.

Application of CAD/CAM Tools:

- Students will understand how to use Fusion 360 to create files for different manufacturing processes.
- They will be able to create .stl files for 3D printing, PDF files for laser cutting, and G-code for CNC machining.
- They will recognize the importance of selecting the appropriate file format and settings based on the requirements of the manufacturing process.
- **Design Constraints and Evaluation:**
- Students will understand the importance of evaluating design solutions to ensure they meet design constraints.
- They will be able to identify and prioritize design

	<p>constraints such as size, material, functionality, and cost.</p> <ul style="list-style-type: none"> • They will develop the ability to critically evaluate design solutions and make revisions as needed to meet the desired criteria. <p>Interdisciplinary Skills and Collaboration:</p> <ul style="list-style-type: none"> • Students will recognize the interdisciplinary nature of the design and manufacturing process. • They will understand the importance of collaboration between designers, engineers, and manufacturers to develop and produce successful products. • They will develop communication skills necessary for effective collaboration and the ability to integrate feedback into the design process.
Demonstration of Learning:	Pacing for Unit
Variety of Projects	12 Weeks
Unit-specific Vocabulary:	Aligned Unit Materials, Resources, and Technology (beyond core resources):
Additive Manufacturing, Assembly, Cad (Computer-Aided Design), Cam (Computer-Aided Manufacturing), Constraints, Cnc Machining, Design Process, Evaluation, Collet, Caliper, Filament, Fusion 360, G-Code, Interdisciplinary, Iterative, Laser Cutting, Pdf (Portable Document Format), Prototyping, Stl File, Subtractive Manufacturing, Stock, Technical Drawing, 3d Printing, X Axis, Y Axis, Z Axis	Autodesk Fusion 3D printer(s) Laser printer(s) Machines - milling/ router/ lathe
Differentiation through Universal Design for Learning	
UDL Indicator	Teacher Actions:
Expression and Communication: Use multiple tools for construction and composition; Build fluencies with graduated levels of support for practice and performance	<ul style="list-style-type: none"> • Provide Computer-Aided-Design (CAD), music notation (writing) software, or mathematical notation software • Use web applications (e.g., wikis, animation, presentation) • Provide differentiated models to emulate (i.e. models that demonstrate the same outcomes but use differing approaches, strategies, skills, etc.) • Provide scaffolds that can be gradually released with increasing independence and skills (e.g., embedded into digital reading and writing software) • Provide differentiated feedback (e.g., feedback that is accessible because it can be customized to individual learners) • Provide multiple examples of novel solutions to authentic problems
Supporting Multilingual/English Learners	
Related CELP standards:	Learning Targets:

An EL can . . .participate in grade appropriate oral and written exchanges of information, ideas, and analyses, responding to peer, audience, or reader comments and questions.

I can demonstrate the use of Fusion 360 to create the necessary file(s) needed to export to a device to create a part.

Level 1: With prompting and support, use a very limited set of strategies to:

- Follow basic instructions to navigate Fusion 360.
- Use simple vocabulary to describe the basic functions of Fusion 360.
- Respond to yes/no questions and some basic questions about Fusion 360.

Level 2: With prompting and support, use an emerging set of strategies to:

- Navigate Fusion 360 with assistance to create simple files.
- Participate in short exchanges about using Fusion 360 with basic vocabulary.
- Respond to simple questions about the functions and features of Fusion 360.

Level 3: With guidance and support, use a developing set of strategies to:

- Demonstrate how to use Fusion 360 to create files for manufacturing with guidance.
- Engage in discussions about Fusion 360 using academic and domain-specific vocabulary.
- Add relevant information and evidence to discussions about using Fusion 360.
- Restate key ideas about using Fusion 360 expressed by others.

Level 4: Use an increasing range of strategies to:

- Independently demonstrate how to use Fusion 360 to create files for manufacturing.
- Engage in discussions and written exchanges about Fusion 360 on various topics and issues using academic and domain-specific vocabulary.
- Build on the ideas of others regarding using Fusion 360.
- Clearly express your own ideas about using Fusion 360 with specific evidence.
- Ask and answer questions to clarify steps and concepts related to using Fusion 360.
- Summarize key points discussed about using Fusion 360.

Level 5: Use a wide range of strategies to:

- Independently and proficiently demonstrate the use of Fusion 360 to create files for manufacturing on substantive topics and issues.
- Engage in extended discussions and written exchanges about Fusion 360 using academic and domain-specific vocabulary.
- Build on the ideas of others to deepen discussions about using Fusion 360.
- Clearly and persuasively express own ideas about using Fusion 360 with specific and relevant evidence.
- Refer to specific evidence from texts or research to support ideas about using Fusion 360.
- Ask and answer questions that probe reasoning and claims related to using Fusion 360.
- Summarize key points and evidence discussed about using Fusion 360.

Lesson Sequence	Learning Target	Success Criteria/Assessment/Resources
1	I can apply each of the steps of the design process to take an idea and turn it into a solution.	<ul style="list-style-type: none"> • I can explain what the design process is. • I can explain the steps of the design process • I can utilize each step of the design process to create a design solution • I can evaluate the design solution to insure it effectively meets design constraints
2	I can explain the difference between additive and subtractive manufacturing?	<ul style="list-style-type: none"> • I can name 3 additive manufacturing processes as well as the benefits and drawbacks of it • I can name 3 subtractive manufacturing processes as well as the benefits and drawbacks of it
3	I can demonstrate the use of Fusion 360 to create the necessary file(s) needed to export to a device to create a part.	<ul style="list-style-type: none"> • I can create a physical part utilizing Fusion 360 to create a .stl file and export it into MakerPrint for setup for a 3D printer. • I can create a physical part utilizing Fusion 360 for export as a pdf file into CorelDRAW for setup of a

		<p>laser printer</p> <ul style="list-style-type: none">• I can create G-code utilizing Fusion 360 to export into a CNC machine for subtractive processing of a material
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Course Title:	Content Area:	Grade Level:	Credit (if applicable)
Child, Family and Community	CTE, Education Pathway	9-12	0.5

Course Description:

Child, Family and Community is a course that focuses on the stages of childhood development. This spans from prenatal to adolescence development. Additionally students will explore various careers working with children. While providing an orientation to early childhood development, emphasis will be on current issues related to families, and communities. Cultural diversity is embedded throughout course topics and activities.

Aligned Core Resources:

- Brisbane, H. (2010). *The Developing Child* (2010th ed.). McGraw Hill Glencoe. 978-0-07-88360-6
- Brisbane, H. (2010). *The Developing Child Case Studies* (2010th ed.). McGraw Hill Glencoe. 0-07-820724-X
- Brisbane, H. (2010). *The Developing Child Student Activity Manual Teacher Annotated Edition* (2010th ed.). McGraw Hill Glencoe. 0-07-868970-8
- Brisbane, H. (2010). *Observing & Participating* (2010th ed.). McGraw Hill Glencoe. 0-07-820718-5
- RealCare Baby® 3 Infant Simulator

Connection to the *BPS Vision of the Graduate*

- EMPATHY**
- Demonstrating understanding of others perspectives and needs.
- GLOBAL AWARENESS**
- Learn from and work collaboratively with individuals representing diverse cultures, religions and lifestyles in a spirit of mutual respect and open dialogue in personal, work and community contexts.
- COMMUNICATION**
- Articulates thoughts and ideas effectively using oral, written and nonverbal communication skills in a variety of forms and contexts.
- CONTENT MASTERY**
- Develop and draw from a baseline understanding of knowledge in academic disciplines from our Bristol curriculum
- CRITICAL THINKING AND PROBLEM SOLVING**
- Make sound judgements and decisions.
 - Identify, define and solve authentic problems and essential questions.

Additional Course Information:
Knowledge/Skill Dependent courses/prerequisites

Link to [*Completed Equity Audit*](#)

Standard Matrix

[ELDS](#)
[Advance CTE-Education](#)
[National Standards for FCS](#)

Standard	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
National Standards for Family and Consumer Science Education					
4.1 Analyze career paths within early childhood, education & related services.	X				

4.2 Analyze developmentally appropriate and culturally responsive practices to plan for early childhood, education, and services.			X		X
4.3 Demonstrate integration of curriculum and instruction to meet developmental needs and interests of children, youth and adults, considering gender, ethnicity, geographical, cultural, and global influences.		X	X	X	X
4.4 Demonstrate a safe and healthy learning environment for children, youth and adults.			X		
4.5 Demonstrate skills for building and maintaining positive collaborative relationships with children, youth and adults in their family and community environments, considering gender, ethnicity, geographical, cultural, and global influences.				X	
Advance CTE Standards					
EDC01.04 Analyze and apply knowledge of the relationships between education and society to enhance learner achievement.			X	X	
EDC01.05 Explain and apply a variety of instructional models to enhance learning achievement.					
EDC03.01 Apply problem-solving and critical thinking skills in educational and training settings to enhance instruction and learner achievement.				X	
EDPC01.03 Employ knowledge of learning and developmental theory to describe individual learners.		X	X	X	X

Unit Links

- [Unit 1: Why Do We Study Children?](#)
- [Unit 2: Prenatal Development and Infancy](#)
- [Unit 3: Early Childhood Development](#)
- [Unit 4: Adolescence](#)
- [Unit 5: Building Families](#)

Unit Title:	
Unit 1: Why Do We Study Children?	
Relevant Standards: Bold indicates priority	
<ul style="list-style-type: none"> ● 4.1.1 Explain the roles and functions of individuals engaged in early childhood, education, and services. ● 4.1.2 Analyze opportunities for employment, entrepreneurial endeavors, and emerging careers. ● 4.1.3 Summarize education and training requirements and opportunities for career paths in early childhood, education, and services. ● 4.1.4 Analyze the impact of early childhood, education, and services occupations on individual/family, local, state, national, and global economies. 	
Essential Question(s):	Enduring Understanding(s):
<ul style="list-style-type: none"> ● Why is it important to consider personal interests, aptitudes, and abilities when considering a career? ● Why is an understanding of child development necessary when working with children? 	<ul style="list-style-type: none"> ● Understanding Child Development: Students will recognize the significance of studying children and their development in various contexts, including education, psychology, and social work. ● Benefits of Studying Children: Students will appreciate the benefits of studying children, such as gaining insights into human behavior, learning effective teaching strategies, and understanding the needs of children in different developmental stages. ● Self-Reflection on Attitudes: Students will reflect on their own attitudes and beliefs about working with children, recognizing how these attitudes may influence their interactions and career choices. ● Career Exploration: Students will explore and summarize qualifications, education requirements, and job descriptions for at least three careers involving working with children, thereby gaining insight into potential career paths. ● Interest in Careers Working with Children: Students will identify and express interest in at least three careers involving working with children, demonstrating an understanding of their personal preferences and career goals. ● Investigation of Career Options: Students will investigate a variety of career options related to working with children, expanding their awareness of the diverse opportunities available in this field. ● Effective Communication: Students will accurately use vocabulary related to careers working with children when describing their chosen career paths, demonstrating effective communication skills in discussing their interests and aspirations.
Demonstration of Learning:	Pacing for Unit
Investigation of at least 3 child related careers and creation of posters to demonstrate their findings.	4 class periods

Unit-specific Vocabulary:

Aptitude, Career Ladder, Career Path, Caregiver, Entry-level job, Entrepreneur, Internship, Job Shadowing, Paraprofessional, Professional, Service Learning, Work-based

Anticipated misconceptions:

- **Misconception:** Children's development is solely determined by genetics, and studying them is unnecessary.
 - **Clarification:** Studying children's development involves understanding various factors, including genetics, environment, and interactions. While genetics play a role, studying children helps identify how different factors contribute to their growth and behavior.
- **Misconception:** Studying children's development is only relevant for those planning to become teachers or childcare providers.
 - **Clarification:** Understanding child development is beneficial for various careers and life situations, including parenting, healthcare, psychology, and policymaking. It helps individuals comprehend human behavior and development, which is valuable in many fields.
- **Misconception:** Child development is a straightforward process, and there's little need for in-depth study.
 - **Clarification:** Child development is complex and influenced by various factors like genetics, environment, culture, and individual differences. Studying it helps recognize patterns, milestones, and potential challenges in children's growth and behavior.
- **Misconception:** Studying children's development is only about understanding physical growth.
 - **Clarification:** Child development encompasses physical, cognitive, emotional, and social growth. It involves understanding how children think, learn, feel, and interact with others, not just their physical changes.
- **Misconception:** Children's development is universal, and studying them doesn't require cultural awareness.
 - **Clarification:** Child development is influenced by cultural norms, values, and practices. It's essential to study children within their cultural context to understand how factors like family dynamics, traditions, and beliefs shape their development.

Differentiation through *Universal Design for Learning***UDL Indicator**

ENGAGEMENT: Optimize relevance, volume and authenticity

Teacher Actions:

- Vary activities and sources of information so that they can be:
- Personalized and contextualized to learners' lives
 - Culturally relevant and responsive
 - Socially relevant
 - Age and ability appropriate
 - Appropriate for different racial, cultural, ethnic, and gender groups
 - Design activities so that learning outcomes are authentic, communicate to real audiences, and reflect a purpose that is clear to the participants
 - Provide tasks that allow for active participation, exploration and experimentation
 - Invite personal response, evaluation and self-reflection to content and activities
 - Include activities that foster the use of imagination to solve novel and relevant problems, or make sense of complex ideas in creative ways

Supporting Multilingual/English Learners**Related *CELP standards:*****Learning Targets:**

An EL can . . .participate in grade appropriate oral and written exchanges of information, ideas, and analyses, responding to peer, audience, or reader comments and questions.

I can explain the importance of studying children and their development.

- Level 1: With prompting and support, an EL can explain the importance of studying children and their development by using basic vocabulary and simple sentences. They can provide basic information about why studying children is important, responding to yes/no questions and simple questions with assistance.
- Level 2: With prompting and support, an EL can explain the importance of studying children and their development using emerging strategies. They can participate in short conversations and written exchanges, using vocabulary related to child development. They can respond to simple questions about the importance of studying children.
- Level 3: With guidance and support, an EL can explain the importance of studying children and their development using a developing set of strategies. They can participate in conversations and discussions, expressing their own ideas with assistance. They can ask and answer relevant questions about child development and add information and evidence to support their ideas.
- Level 4: With an increasing range of strategies, an EL can explain the importance of studying children and their development more independently. They can participate in conversations, discussions, and written exchanges on the topic, expressing their own ideas clearly with support. They can support their points with specific evidence and answer questions to clarify their ideas.
- Level 5: With a wide range of strategies, an EL can explain the importance of studying children and their development proficiently. They can participate in extended conversations and discussions, expressing their ideas clearly and persuasively. They can refer to specific evidence from texts or research to support their ideas and ask questions that probe reasoning and claims. They can summarize the key points and evidence discussed about child development.

Lesson Sequence	Learning Target	Success Criteria/Assessment/Resources
1	I can explain the importance of studying children and their development.	<ul style="list-style-type: none"> • I can describe at least two ways studying children is beneficial to you. • I can reflect on my own attitudes about working with children.
2-3	I can summarize the qualifications, education, and description of at least 3 careers working with children that I am interested in.	<ul style="list-style-type: none"> • I can identify at least 3 careers working with children that are interesting to me. • I can investigate a variety of career options that involve working with children. • I can accurately utilize vocabulary in my description of my chosen careers.

Unit Title:	
Unit 2: Prenatal Development and Infancy	
Relevant Standards: Bold indicates priority	
<ul style="list-style-type: none"> ● 4.2.3 Analyze cultural and environmental influences when assessing development of children, youth and adults. ● 4.2.5 Analyze strategies that promote growth and development of children, youth and adults. ● 4.5.3 Demonstrate interpersonal skills that promote positive and productive relationships with learners. ● 4.5.4 Implement strategies for constructive and supportive interactions between children, youth and adults and their families and communities. 	
Essential Question(s):	Enduring Understanding(s):
<ul style="list-style-type: none"> ● How do fetuses develop during the prenatal period? ● What conditions influence an infant's growth and development? ● How are physical, intellectual, emotional, and social growth and development interrelated? 	<p>Prenatal Development and Maternal Changes:</p> <ul style="list-style-type: none"> ● Understanding the stages of prenatal development and how they impact both the fetus and the mother provides insight into the journey from conception to birth. ● Vocabulary related to prenatal development helps in accurate communication and understanding of the process. ● Awareness of how the fetus develops and changes in each trimester, as well as the corresponding impact on the mother, fosters a deeper understanding of pregnancy. <p>Labor and Delivery:</p> <ul style="list-style-type: none"> ● Knowledge of the stages of labor and delivery, including key terms like epidural and contraction, allows for a comprehensive understanding of childbirth. ● Identifying key characteristics of each stage of labor aids in recognizing the progression of childbirth and potential complications. ● Understanding reasons for cesarean sections provides insight into medical interventions during childbirth. <p>Impact of Birth Defects:</p> <ul style="list-style-type: none"> ● Awareness of birth defects, both genetic and environmental, highlights the importance of prenatal care and genetic counseling. ● Investigating causes, characteristics, and treatments for various birth defects enhances understanding and awareness of potential challenges. ● Communication about different birth defects with peers promotes collaborative learning and understanding.
Demonstration of Learning:	Pacing for Unit
<ul style="list-style-type: none"> ● Students will participate in the RealCare baby simulation or an alternative project. ● Students will investigate milestones by month and 	3-4 Weeks

discuss the trajectory of development with classmates.	
Unit-specific Vocabulary:	
Amniotic Fluid, Attachment, Blastocyst, Depth Perception, Developmental Milestone, Fetus, Fine Motor Skills, Gross Motor Skills, Implantation, Object Permanence, Placenta, Pincer Grasp, Prenatal, Reflex, Sensory, SIDS, Sonogram, Swaddle, Temperament, Trimester, Tummy Time, Umbilical Cord, Ultrasound, Uterus, Vernix, Zygote.	
Anticipated misconceptions:	
<ul style="list-style-type: none"> ● Misconception: Fetal development starts at birth. <ul style="list-style-type: none"> ○ Clarification: Fetal development begins at conception, not at birth. It involves various stages of growth and organ formation during the prenatal period. ● Misconception: The environment outside the womb doesn't affect a baby's development. <ul style="list-style-type: none"> ○ Clarification: Factors such as maternal nutrition, exposure to toxins, and maternal stress can significantly influence fetal development. ● Misconception: Physical development is unrelated to emotional and social development. <ul style="list-style-type: none"> ○ Clarification: Physical, emotional, and social development are interconnected. For example, a baby's ability to crawl (physical development) can affect their exploration and interaction with the environment (social and emotional development). ● Misconception: All babies develop at the same rate. <ul style="list-style-type: none"> ○ Clarification: While there are general milestones, each baby develops at their own pace. Variations in genetics, environment, and individual differences can affect developmental timelines. ● Misconception: Babies are born with all the abilities they will ever have. <ul style="list-style-type: none"> ○ Clarification: Babies are born with basic reflexes and sensory abilities, but many skills, such as language and fine motor skills, develop over time through learning and experience. 	
Differentiation through <i>Universal Design for Learning</i>	
UDL Indicator	Teacher Actions:
Representation: Clarify Vocabulary and Symbols	<ul style="list-style-type: none"> ● Pre-teach vocabulary and symbols, especially in ways that promote connection to the learners' experience and prior knowledge ● Provide graphic symbols with alternative text descriptions ● Highlight how complex terms, expressions, or equations are composed of simpler words or symbols ● Embed support for vocabulary and symbols within the text (e.g., hyperlinks or footnotes to definitions, explanations, illustrations, previous coverage, translations) ● Embed support for unfamiliar references within the text (e.g., domain specific notation, lesser known properties and theorems, idioms, academic language, figurative language, mathematical language, jargon, archaic language, colloquialism, and dialect)
Supporting Multilingual/English Learners	
Related <i>CELP standards:</i>	Learning Targets:
An EL can . . .participate in grade appropriate oral and written exchanges of information, ideas, and analyses,	

responding to peer, audience, or reader comments and questions.

I can describe activities that enhance infant health, wellness, and development.

- Level 1: (With Prompting and Supports): An EL can listen and talk about things they know, like things babies need. They can say what helps babies be healthy.
- Level 2: (With Prompting and Supports): An EL can talk about things babies need, like food and sleep. They can say what makes babies grow and be strong.
- Level 3: (With Guidance and Supports): An EL can talk about things that help babies be healthy, like playing and sleeping well. They can say why these things are important for babies.
- Level 4: (Use an Increasing Range of Strategies): An EL can discuss different activities that help babies grow and stay healthy, like playing with toys and eating healthy food. They can explain how these activities support a baby's development.
- Level 5: (Use a Wide Range of Strategies): An EL can engage in detailed conversations about various activities that enhance infant health, wellness, and development, such as breastfeeding, tummy time, and sensory play. They can provide persuasive explanations supported by evidence from texts or research, discussing the importance of these activities in promoting a baby's physical, cognitive, and emotional well-being.

Lesson Sequence	Learning Target	Success Criteria/ Assessment	Resources
1-4	I can articulate how a fetus develops and mother changes during each trimester of the prenatal period.	<ul style="list-style-type: none"> ● I can accurately use prenatal vocabulary. ● I can describe at least 3 ways the fetus develops in each trimester. ● I can explain how prenatal development impacts the mother in each trimester. 	
5	I can describe the 3 stages of labor and delivery.	<ul style="list-style-type: none"> ● I can define the words epidural and contraction. ● I can identify key characteristics of each stage of labor. ● I can explain at least two reasons a baby might be born by cesarean section. 	
6-7	I can explain how birth defects impact child development.	<ul style="list-style-type: none"> ● I can define the terms genetic and environmental birth defects. ● I can investigate causes, characteristics, and treatments for an assigned birth defect. ● I can communicate with my classmates about their findings on at least 3 other birth defects. ● I can explain how birth defects might impact infant development. 	
8	I can practice safe and effective methods to care for a baby in preparation for my Real Care Baby simulation.	<ul style="list-style-type: none"> ● I can correctly apply the vocabulary related to the development and care of a baby in its 1st year. ● I can describe strategies that can be used to care for infants. ● I can utilize strategies from video clips and diagrams to practice caring for a newborn. 	
9-12	I can articulate how infants develop throughout their first year of life and how caregivers and the environment can influence the babies health and development.	<ul style="list-style-type: none"> ● I can identify the domains of development ● I can list at least two milestones in each domain of infant development. ● I can explain patterns of development that usually occur in each domain. ● I can describe activities that enhance infant health, wellness, and development. 	

Unit Title:	
Unit 3: Early Childhood Development	
Relevant Standards: Bold indicates priority	
Essential Question(s):	Enduring Understanding(s):
<ul style="list-style-type: none"> • What are the key aspects of physical, social, intellectual, and emotional development in young children? • How do various activities contribute to the development of young children in each of these four domains? • How can we enhance the development of young children through purposeful activities and interactions? 	<ul style="list-style-type: none"> • Understanding Development: Students will understand the physical, social, intellectual, and emotional development of young children, recognizing the interconnectedness of these domains in shaping a child's growth. • Activity Evaluation: Students will be able to evaluate and explain how various activities contribute to the development of young children within each of the four domains, discerning the effects of different experiences on child development. • Age Definition and Development: Students will define the age ranges of toddlers, preschoolers, and school-aged children, and describe how children develop in each domain within these age ranges, recognizing the unique characteristics and milestones of each developmental stage. • Vocabulary Proficiency: Students will accurately use vocabulary to explain the development of toddlers, preschoolers, and school-aged children, demonstrating a clear understanding of key terms and concepts related to child development. • Enhancement Strategies: Students will explain at least two strategies to enhance the development of toddlers, preschoolers, and school-aged children, demonstrating an understanding of practical methods to support child growth and learning. • Activity Design: Students will demonstrate their understanding of early childhood development by designing activities or learning materials that promote development in toddlers, preschoolers, or school-aged children, applying their knowledge to create purposeful and effective learning experiences.
Demonstration of Learning:	Pacing for Unit
	6-7 classes
Unit-specific Vocabulary:	
Aggressive Behavior, Alliteration, Ambidextrous, Bilingual, Competition, Cultural Bias, Developmentally Appropriate, Dexterity, Enamel, Finger Play, Fluoride, Group Identification, Intelligence Quotient, Integration, Moral Development, Multiple Intelligences, Permanent Teeth, Peer, Phoneme, Preschooler, Sensory, Toddler.	

Anticipated misconceptions:

- **Misconception:** Development in one domain (e.g., physical) does not affect development in other domains (e.g., social or emotional).
 - **Clarification:** Development in one domain is interconnected with development in other domains. For example, a child's physical development, such as improving fine motor skills, can enhance their ability to interact socially through activities like drawing or building with blocks.
- **Misconception:** All activities contribute equally to all domains of child development.
 - **Clarification:** Different activities have different impacts on various domains of development. While some activities may primarily target one domain (e.g., physical activities like running improve physical development), others can target multiple domains simultaneously (e.g., playing a cooperative game can enhance both social and cognitive development).
- **Misconception:** Developmental milestones are fixed and occur at the same age for all children.
 - **Clarification:** Developmental milestones are general guidelines, and individual children may reach them at different times. Factors like genetics, environment, and individual differences influence when children achieve milestones. It's essential to recognize the range of "normal" development.
- **Misconception:** Once children reach a certain age range, their development in all domains progresses uniformly.
 - **Clarification:** Development in each domain can vary within the same age range. For example, while one preschooler may excel in language development, another may struggle with fine motor skills. It's important to understand that development is multifaceted and occurs at different rates for different children.
- **Misconception:** Using complex vocabulary is the most important aspect of demonstrating understanding of child development.
 - **Clarification:** While accurate vocabulary is crucial, true understanding of child development goes beyond using specific terms. It involves comprehending how these concepts apply to real-life situations and how they interrelate with one another.
- **Misconception:** Enhancement strategies must be complex to be effective.
 - **Clarification:** Effective enhancement strategies can be simple yet impactful. For example, reading to a child regularly promotes language development, while engaging in imaginative play supports cognitive and social development. The effectiveness of a strategy lies in its consistency and appropriateness to the child's needs.
- **Misconception:** Any activity can be beneficial for child development as long as it's engaging.
 - **Clarification:** Purposeful and intentional activity design is essential for promoting development effectively. Activities should be tailored to the specific developmental needs and interests of the children involved, ensuring they target relevant domains of development and encourage growth.
- **Misconception:** Designing activities for children is solely about keeping them entertained.
 - **Clarification:** While engaging children is important, the primary goal of activity design should be to facilitate learning and development. Activities should provide opportunities for exploration, problem-solving, and skill-building while also being enjoyable for the children.

Differentiation through [Universal Design for Learning](#)

UDL Indicator	Teacher Actions:
Comprehension: Highlight patterns, critical features and big ideas and relationships	<ul style="list-style-type: none">● Highlight or emphasize key elements in text, graphics, diagrams, formulas● Use outlines, graphic organizers, unit organizer routines, concept organizer routines, and concept mastery routines to emphasize key ideas and relationships● Use multiple examples and non-examples to emphasize critical features● Use cues and prompts to draw attention to critical features● Highlight previously learned skills that can be used to solve unfamiliar problems

Supporting Multilingual/English Learners

Related *CELP standards*:

Learning Targets:

An EL can . . . participate in grade appropriate oral and written exchanges of information, ideas, and analyses, responding to peer, audience, or reader comments and questions.

I can demonstrate my learning of early childhood development by designing an activity/ learning material that would enhance development.

- Level 1: With prompting and support, ELs can gather basic information on early childhood development from provided print and digital sources. They can label collected information and experiences related to child development.
- Level 2: With prompting and support, ELs can conduct short research projects on early childhood development to answer questions. They can gather information from provided print and digital sources, record data, and summarize key information.
- Level 3: With guidance and support, ELs can conduct short research projects on early childhood development. They gather information from multiple print and digital sources, evaluate the reliability of each source, and paraphrase key information in a short written report. They can also include illustrations or diagrams when useful and provide a list of sources.
- Level 4: ELs can conduct both short and more sustained research projects on early childhood development. They gather and synthesize information from multiple print and digital sources, using effective search terms. They evaluate the reliability of each source, integrate information into an organized written report, and cite sources appropriately.
- Level 5: ELs can conduct both short and more sustained research projects on early childhood development to answer questions or solve problems. They gather and synthesize information from multiple print and digital sources, using advanced search terms effectively. They critically analyze and integrate information into a clearly organized oral or written text, and cite sources appropriately.

Lesson Sequence	Learning Target	Success Criteria/ Assessment	Resources
1-2	<ul style="list-style-type: none"> • I can describe the physical, social, intellectual development, and emotional development of young children. • I can evaluate and explain how a variety of activities support development within each of the 4 domains. 	<ul style="list-style-type: none"> • I can define the age range of a toddler. • I can describe at least two ways a toddler develops in each of the four domains of development. • I can accurately use vocabulary to explain toddler development. • I can explain at least two ways to enhance toddler development. 	
3-4	<ul style="list-style-type: none"> • I can describe the physical, social, intellectual development, and emotional development of young children. • I can evaluate and explain how a variety of activities support development within each of the 4 domains. 	<ul style="list-style-type: none"> • I can define the age range of a preschooler. • I can describe at least two ways a preschooler develops in each of the four domains of development. • I can accurately use vocabulary to explain preschool development. • I can explain at least two ways to enhance preschooler development. 	
5-6	<ul style="list-style-type: none"> • I can describe the physical, social, intellectual development, and emotional development of young children. • I can evaluate and explain how a variety of activities support 	<ul style="list-style-type: none"> • I can define the age range of a school aged child. • I can describe at least two ways a school aged child develops in each of the four domains of development. • I can accurately use vocabulary to explain school aged child development. 	

	development within each of the 4 domains.	<ul style="list-style-type: none"> • I can explain at least two ways to enhance school aged child development.
7	<ul style="list-style-type: none"> • I can demonstrate my learning of early childhood development by designing an activity/ learning material that would enhance development. 	<ul style="list-style-type: none"> •

Unit Title:	
Unit 4: Adolescence	
Relevant Standards: Bold indicates priority	
Essential Question(s):	Enduring Understanding(s):
<ul style="list-style-type: none"> • How do families and peers influence adolescent development, and what are the positive and negative aspects of these influences? • What are some common decisions and tasks that adolescents face as they transition to young adulthood, and how do they navigate these challenges? • How can adolescents set and work towards personal goals, and what strategies can they use to overcome obstacles and setbacks? 	<p>Understanding the Influence of Families and Peers on Adolescent Development:</p> <ul style="list-style-type: none"> • Students will understand that families and peers play significant roles in shaping adolescent development, influencing various aspects such as identity formation, behavior, and decision-making. • Students will recognize that both positive and negative aspects exist in the influence of families and peers, understanding that supportive relationships can foster healthy development while negative influences can lead to risky behaviors and emotional challenges. <p>Understanding Common Challenges and Decisions in Adolescent Transition to Young Adulthood:</p> <ul style="list-style-type: none"> • Students will understand the common challenges adolescents face during their transition to young adulthood, including decisions regarding education, career, relationships, and personal identity. • Students will recognize that navigating these challenges requires adolescents to develop skills such as critical thinking, problem-solving, and effective communication. <p>Understanding Goal-Setting and Resilience in Adolescent Development:</p> <ul style="list-style-type: none"> • Students will understand the importance of setting personal goals for adolescents in fostering motivation, direction, and self-efficacy. • Students will recognize that adolescents encounter obstacles and setbacks in pursuing their goals, and they will understand the strategies for overcoming these challenges, such as perseverance, adaptability, and seeking support when needed.
Demonstration of Learning:	Pacing for Unit
	4 class periods
Unit-specific Vocabulary:	
Adolescence, Amygdala, Early Adolescence, Financial Planning, Growth Spurt, Late Adolescence, Middle Adolescence, Peer Pressure, Puberty.	
Anticipated misconceptions:	

- **Misconception:** Families and peers have a minor influence on adolescent development compared to other factors like genetics or personal choices.
 - **Clarification:** While genetics and personal choices do play a role, research consistently shows that families and peers have a significant impact on adolescent development. The quality of relationships with family members and peers can shape an adolescent's behavior, beliefs, and emotional well-being.
- **Misconception:** All influences from families and peers are negative or harmful to adolescent development.
 - **Clarification:** While negative influences certainly exist, such as peer pressure or unhealthy family dynamics, positive influences from families and peers are also prevalent. Positive influences include emotional support, guidance, and opportunities for learning and growth. It's important to recognize and cultivate these positive influences.
- **Misconception:** Adolescents don't face significant challenges or decisions during their transition to young adulthood; it's mostly a carefree time.
 - **Clarification:** Transitioning to young adulthood is a period marked by numerous challenges and decisions. Adolescents often face decisions about education, career paths, relationships, and establishing their identity. These decisions can be stressful and require thoughtful consideration and planning.
- **Misconception:** Adolescents always navigate challenges and decisions successfully without any difficulty.
 - **Clarification:** While many adolescents successfully navigate challenges, setbacks and difficulties are common. It's natural to encounter obstacles when facing significant life decisions. Resilience is about bouncing back from setbacks, learning from failures, and persisting in the face of challenges.
- **Misconception:** Setting personal goals is unnecessary for adolescents; they'll naturally figure out their path as they grow older.
 - **Clarification:** Setting personal goals is crucial for adolescents to establish direction and purpose in their lives. Without clear goals, adolescents may feel adrift or lack motivation. Goals provide a roadmap for their future and help them focus their efforts toward achieving their aspirations.
- **Misconception:** Overcoming obstacles and setbacks is solely about trying harder or being more determined.
 - **Clarification:** While determination is important, overcoming obstacles often requires a combination of strategies. These may include seeking support from others, developing problem-solving skills, adjusting plans when necessary, and practicing self-care. It's not just about trying harder but also about trying smarter.

Differentiation through [Universal Design for Learning](#)

UDL Indicator	Teacher Actions:
Representation: Guide Appropriate Goal Setting	<ul style="list-style-type: none"> ● Provide prompts and scaffolds to estimate effort, resources, and difficulty ● Provide models or examples of the process and product of goal-setting ● Provide guides and checklists for scaffolding goal-setting ● Post goals, objectives, and schedules in an obvious place

Supporting Multilingual/English Learners

Related CELP standards:	Learning Targets:
<p>An EL can conduct research and evaluate and communicate findings to answer questions or solve problems.</p> <ul style="list-style-type: none"> ● I can describe the physical, social, intellectual, and emotional development in adolescents and young adulthood. ● Level 1: With prompting and support, an EL can describe basic aspects of physical, social, intellectual, and emotional development in adolescents and young adults. They can identify simple characteristics or changes in each area, such as physical growth, forming friendships, learning new skills, and experiencing different emotions. ● Level 2: With prompting and support, an EL can describe key aspects of physical, social, intellectual, and emotional development in adolescents and young adults. They can gather information from provided sources, 	

such as simple texts or visual resources, to describe development in each area.

- Level 3: With guidance and support, an EL can describe various aspects of physical, social, intellectual, and emotional development in adolescents and young adults. They can gather information from multiple provided sources, including texts, videos, or online resources, to describe development in each area.
- Level 4: An EL can describe in detail the physical, social, intellectual, and emotional development in adolescents and young adults. They can conduct research to gather and synthesize information from multiple sources, such as books, articles, and reputable websites. They can effectively use search terms to find relevant information about each aspect of development.
- Level 5: An EL can provide a comprehensive description of the physical, social, intellectual, and emotional development in adolescents and young adults. They can conduct thorough research to gather and synthesize information from a wide range of sources, including academic journals, research papers, and expert opinions. They can use advanced search terms and strategies to find in-depth information about each aspect of development.

Lesson Sequence	Learning Target	Success Criteria/Assessment/Resources
1-2	<ul style="list-style-type: none"> ● I can describe the physical, social, intellectual, and emotional development in adolescents and young adulthood. ● I can describe the role of families and peers on adolescent development. 	<ul style="list-style-type: none"> ● I can describe the physical changes that occur during adolescence. ● I can explain how physical development during adolescence impacts overall health and well being. ● I can identify the key aspects of social development. ● I can describe the importance of social interactions, friendships and social networks during adolescence. ● I can discuss cognitive changes that occur during adolescence. ● I can explain how formal education and exposure to diverse experiences contributes to intellectual development. ● I can describe the emotional changes and challenges faced by adolescents. ● I can identify factors that influence emotional development. ● I can explain how family relationships influence adolescent development. ● I can describe the impact of family support , guidance and expectations on adolescent self esteem, identity formation and emotional well-being. ● I can describe how adolescents form friendships, navigate peer conflicts, and seek social belonging through peer groups. ● I can analyze how positive and negative influences from families and peers shape adolescents' attitudes, behaviors, and outcomes.
3-4	<ul style="list-style-type: none"> ● I can discuss some of the decisions and tasks that adolescents face and think about the path I want to take in my future. ● I can identify at least two action steps that might help me to achieve my goals. 	<ul style="list-style-type: none"> ● I can discuss common decisions and tasks that adolescents face as they transition to adulthood, such as choosing a career path, selecting educational opportunities, managing finances, and establishing relationships. ● I can explain the significance of these decisions and tasks in shaping future opportunities and outcomes. ● I can reflect on their own aspirations and interests, considering potential career paths, educational goals, and personal values. ● I can articulate why certain goals are important to

		<p>them and how achieving these goals aligns with their vision for the future.</p> <ul style="list-style-type: none">● I can anticipate potential obstacles or challenges they may encounter while pursuing their goals, such as financial constraints, time management issues, or lack of support. <p>Resources:</p> <ul style="list-style-type: none">● Game of Life● Vision Board
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Unit Title:	
Unit 5: Building Families	
Relevant Standards: Bold indicates priority	
Essential Question(s):	Enduring Understanding(s):
<ul style="list-style-type: none"> ● How do heredity and environment interact to shape individual development? ● What are the different family structures and functions, and how do they influence individual development? ● How do family challenges and stressors impact family dynamics and individual development? 	<p>Understanding the Interaction of Heredity and Environment:</p> <ul style="list-style-type: none"> ● Students will understand that individual development is influenced by both genetic inheritance (heredity) and environmental factors, and that these factors interact in complex ways. ● Students will recognize that while genetics provide a blueprint, environmental influences such as family, culture, and experiences can modify gene expression and shape development. ● Students will understand that the relative influence of heredity and environment varies for different traits and behaviors, and that both play important roles in determining outcomes. <p>Understanding Family Diversity and Influence:</p> <ul style="list-style-type: none"> ● Students will understand that families come in various structures, including nuclear, extended, single-parent, and blended families, each with its own strengths and challenges. ● Students will recognize that families serve multiple functions, such as providing emotional support, socialization, and identity formation for individuals. ● Students will understand that family dynamics, communication patterns, and cultural values influence individual development and shape relationships within the family and beyond. <p>Understanding the Impact of Family Challenges:</p> <ul style="list-style-type: none"> ● Students will understand that family challenges and stressors, such as divorce, financial struggles, or sibling rivalry, can have significant impacts on family dynamics and individual well-being. ● Students will recognize that families can demonstrate resilience in response to challenges, employing coping strategies and support systems to navigate difficult circumstances. ● Students will understand that the ability to adapt and thrive in the face of adversity is influenced by individual and familial factors, including communication, problem-solving skills, and social support.
Demonstration of Learning:	Pacing for Unit

12 class (includes one class period for final assessment)

Unit-specific Vocabulary:

Blended Family, Custodial Parent, Environment, Extended Family, Foster Child, Heredity, Intergenerational, Legal Guardian, Nuclear Family, Parenting Styles (Authoritarian, Authoritative, Permissive, Uninvolved), Single-Parent Family, Sibling Rivalry

Anticipated misconceptions:

- Misconception: Genetics solely determines an individual's development, and environmental factors have minimal impact.
 - Clarification: While genetics provide the blueprint for traits and characteristics, environmental factors significantly influence how these traits are expressed and developed. Environmental factors such as family upbringing, education, culture, and life experiences play crucial roles in shaping individual development alongside genetic predispositions.
- Misconception: All family structures function in the same way, providing similar levels of support and influence.
 - Clarification: Different family structures have unique dynamics, strengths, and challenges. For example, while nuclear families may offer stability, single-parent families may provide resilience and closeness. Understanding these differences helps recognize the diverse roles families play in individuals' lives.
- Misconception: Family challenges inevitably lead to negative outcomes for individuals and families.
 - Clarification: While family challenges can be difficult, they do not necessarily lead to negative outcomes. Families can demonstrate resilience, adaptability, and growth even in the face of adversity. Challenges can foster stronger family bonds, improved communication, and personal development, highlighting the importance of coping strategies and support systems.
- Misconception: Individuals are solely shaped by their family environment and have no agency in their development.
 - Clarification: While family environments play a significant role in shaping individuals, individuals also actively contribute to their own development. This includes making choices, forming beliefs, and developing skills based on personal experiences, interests, and interactions beyond the family environment.
- Misconception: Genetic traits are fixed and unchangeable throughout an individual's life.
 - Clarification: While genetics provide a foundation for traits, environmental influences can modify gene expression and alter how traits are manifested. Additionally, individuals can engage in behaviors and activities that influence gene expression and development, such as adopting healthy habits or seeking educational opportunities.
- Misconception: The impact of family challenges is the same for everyone within the family.
 - Clarification: The impact of family challenges can vary for individuals within the same family based on factors such as age, personality, coping skills, and support systems. One family member may be more resilient or affected differently by a particular challenge compared to another. Understanding these individual differences is crucial in addressing family challenges effectively.

Differentiation through *Universal Design for Learning*

UDL Indicator

ENGAGEMENT: Optimize relevance, volume and authenticity

Teacher Actions:

- Vary activities and sources of information so that they can be:
- Personalized and contextualized to learners' lives
 - Culturally relevant and responsive
 - Socially relevant
 - Age and ability appropriate
 - Appropriate for different racial, cultural, ethnic, and gender groups
 - Design activities so that learning outcomes are authentic, communicate to real audiences, and reflect a purpose that is clear to the participants

- Provide tasks that allow for active participation, exploration and experimentation
- Invite personal response, evaluation and self-reflection to content and activities
- Include activities that foster the use of imagination to solve novel and relevant problems, or make sense of complex ideas in creative ways

Supporting Multilingual/English Learners

Related CELP standards:

Learning Targets:

An EL can conduct research and evaluate and communicate findings to answer questions or solve problems.

● **I can explain how heredity and environment impact individual development.**

- Level 1: With prompting and support, an EL can describe basic influences of heredity and the environment on individual development.
- Level 2: With prompting and support, an EL can describe basic influences of heredity and the environment on individual development. They can gather information from provided sources, such as simple texts or visual resources, to describe development in each area.
- Level 3: With guidance and support, an EL can describe basic influences of heredity and the environment on individual development. They can gather information from multiple provided sources, including texts, videos, or online resources, to describe development in each area.
- Level 4: An EL can describe in detail the basic influences of heredity and the environment on individual development. They can conduct research to gather and synthesize information from multiple sources, such as books, articles, and reputable websites. They can effectively use search terms to find relevant information about each aspect of development.
- Level 5: An EL can provide a comprehensive description of basic influences of heredity and the environment on individual development. They can conduct thorough research to gather and synthesize information from a wide range of sources, including academic journals, research papers, and expert opinions. They can use advanced search terms and strategies to find in-depth information about each aspect of development.

Lesson Sequence	Learning Target	Success Criteria/ Assessment	Resources
1	I can explain how heredity and environment impact individual development.	<ul style="list-style-type: none"> ● I can define the terms heredity and environment. ● I can identify examples of how heredity and environment impact development. ● I can discuss whether heredity or environment has a more significant impact on individual development. 	
2-4	I can explain the structures and functions of a family.	<ul style="list-style-type: none"> ● I can list and define the family structures. ● I can list and define the functions of a family. ● I can identify strengths and weaknesses of a variety of family structures ● I can describe how an individual's family might impact their development. 	
5-6	I can describe how birth order and sibling relationships impact individual development.	<ul style="list-style-type: none"> ● I can discuss the characteristics of birth order positions ● I can explain what sibling rivalry is and how it impacts development. 	
7-9	I can evaluate the appropriateness of each parenting style in various cultural, socioeconomic, and family contexts.	<ul style="list-style-type: none"> ● I can identify and define different parenting styles, such as authoritarian, authoritative, permissive, and uninvolved. 	

		<ul style="list-style-type: none"> ● I can describe how each parenting style influences children's development, behaviors, and attitudes. ● I can discuss how each parenting style may be effective or ineffective in different situations or for different children. ● I can reflect on their own experiences or observations of different parenting styles.
10-11	I can explain how family challenges and stressors impact family and individual development.	<ul style="list-style-type: none"> ● I can identify various family challenges and stressors, such as divorce, financial difficulties, illness, substance abuse, or domestic violence. ● I can explain how each family challenge or stressor affects the overall dynamics and functioning of the family. ● I can identify emotional, behavioral, and psychological responses that individuals may exhibit in response to stressors. ● I can discuss how families and individuals demonstrate resilience in the face of challenges and stressors.

Course Title:	Content Area:	Grade Level:	Credit (if applicable)
ECE Environmental	Science	11-12	1.0

Course Description:

An introduction to basic concepts and areas of environmental science and how environmental problems can be effectively addressed, using the triple bottom line of sustainability school of thought. Topics include human population; ecological principles; conservation of biological resources; biodiversity; croplands, rangelands, forestlands; soil and water conservation; pollution and water management; and wildlife and fisheries conservation.

Aligned Core Resources:

Required textbook for this course is Friedland and Relyea, Environmental Science, 2nd Edition (2015)

Connection to the *BPS Vision of the Graduate*

- CONTENT MASTERY**
- Develop and draw from a baseline understanding of knowledge in academic disciplines from our Bristol curriculum.
- CRITICAL THINKING AND PROBLEM SOLVING**
- Collect, assess and analyze relevant information
 - Reason effectively. Use systems thinking.
 - Make sound judgments and decisions. Identify, define and solve authentic problems and essential questions.
 - Reflect critically on learning experience, processes and solutions.
 - Transfer knowledge to other situations.
- COLLABORATION**
- Demonstrates ability to work effectively and respectfully with diverse teams
 - Exercise flexibility and willingness to be helpful in making necessary compromises to accomplish a common goal
 - Assume shared responsibility for collaborative work and value the individual contributions made by each team member

Additional Course Information:
Knowledge/Skill Dependent courses/prerequisites

Link to *Completed Equity Audit*

Standard Matrix

AP Environmental Science Practices	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
Practice 1: Concept Explanation Explain environmental concepts, processes, and models presented in written format.						
1.A Describe environmental concepts and processes.	X	X	X	X	X	X

1.B Explain environmental concepts and processes.	X	X	X	X	X	X
1.C Explain environmental concepts, processes, or models in applied contexts.	X	X	X	X	X	X
Practice 2: Visual Representations Analyze visual representations of environmental concepts and processes.						
2.A Describe characteristics of an environmental concept, process, or model represented visually.	X	X	X	X	X	X
2.B Explain relationships between different characteristics of environmental concepts, processes, or models represented visually: (1) In theoretical contexts, (2) In applied contexts	X	X	X	X	X	X
2.C Explain how environmental concepts and processes represented visually relate to broader environmental issues.	X	X	X	X	X	X
Practice 3: Text Analysis Analyze sources of information about environmental issues						
3.A Identify the author's claim.	x					x
3.B Describe the author's perspective and assumptions.	x					x
3.C Describe the author's reasoning (use of evidence to support a claim).	x					x
3.D Evaluate the credibility of a source: (1) Recognize bias; (2) Scientific accuracy	x	x	x	x	x	x
3.E Evaluate the validity of conclusions of a source or research study.	x	x	x	x	x	x
Practice 4: Scientific Experiments Analyze research studies that test environmental principles						
4.A Identify a testable hypothesis or scientific question for an investigation.	X	X	X	X	X	X
4.B Identify a research method, design, and/or measure used.	X	X	X	X	X	X
4.C Describe an aspect of a research method, design, and/or measure used.	X	X	X	X	X	X
4.D Make observations or collect data from laboratory setups	X	X	X	X	X	X
4.E Explain modifications to an experimental procedure that will alter results.	X	X	X	X	X	X
Practice 5 Data Analysis Analyze and interpret quantitative data represented in tables, charts, and graphs						
5.A Describe patterns or trends in data.	X	X	X	X	X	X
5.B Describe relationships among variables in data represented.	X	X	X	X	X	X

5.C Explain patterns and trends in data to draw conclusions.	X	X	X	X	X	X
5.D Interpret experimental data and results in relation to a given hypothesis.	X	X	X	X	X	X
5.E Explain what the data implies or illustrates about environmental issues.	X	X	X	X	X	X
Practice 6 Mathematical Routines Apply quantitative methods to address environmental concepts						
6.A Determine an approach or method aligned with the problem to be solved.	X	X	X	X	X	X
6.B Apply appropriate mathematical relationships to solve a problem, with work shown (e.g., dimensional analysis).	X	X	X	X	X	X
6.C Calculate an accurate numeric answer with appropriate units.	X	X	X	X	X	X
Practice 7 Environmental Solutions Propose and justify solutions to environmental problems						
7.A Describe environmental problems.	X	X	X	X	X	X
7.B Describe potential responses or approaches to environmental problems.	X	X	X	X	X	X
7.C Describe disadvantages, advantages, or unintended consequences for potential solutions.	X	X	X	X	X	X
7.D Use data and evidence to support a potential solution.	X	X	X	X	X	X
7.E Make a claim that proposes a solution to an environmental problem in an applied context.	X	X	X	X	X	X
7.F Justify a proposed solution, by explaining potential advantages.	X	X	X	X	X	X

Unit Links

If unit headings are formatted as a heading, then we can link a Table of Contents to better organize and provide faster access to each unit

[The State Of The Earth And Human Impact](#)

[The Living World](#)

[Land Use](#)

[Energy Resources](#)

[Land, Air, and Water Pollution](#)

[Global Change](#)

Unit Title:	
The State Of The Earth And Human Impact	
Relevant Standards: Bold indicates priority	
All College Board Practices are infused in these lessons.	
Essential Question(s):	Enduring Understanding(s):
<ul style="list-style-type: none"> • Why are natural resources critical to human life, and what are the consequences of their depletion or misuse? • What is sustainability, and why is it challenging to achieve given the current state of the Earth? • How do human activities impact the environment, and what are the consequences for ecosystem services and global sustainability? 	<p>Interdependence of Human Life and Natural Resources:</p> <ul style="list-style-type: none"> • Natural resources are essential for human survival and well-being. • Depletion or misuse of natural resources can have significant consequences for ecosystems and human societies. <p>Importance and Challenges of Sustainability:</p> <ul style="list-style-type: none"> • Sustainability aims to meet the needs of the present without compromising the ability of future generations to meet their own needs. • Achieving sustainability is challenging due to various environmental, social, and economic factors. <p>Human Impact on the Environment:</p> <ul style="list-style-type: none"> • Human activities exert significant pressure on the global environment. • These pressures manifest through both abiotic (non-living) and biotic (living) factors, affecting ecosystem health and biodiversity. <p>Interdisciplinary Nature of Environmental Science:</p> <ul style="list-style-type: none"> • Environmental science is interdisciplinary, drawing on knowledge from various fields such as biology, chemistry, sociology, and economics. • Understanding environmental issues requires considering multiple perspectives and disciplines. <p>Triple Bottom Line and Sustainable Development:</p> <ul style="list-style-type: none"> • The Triple Bottom Line theory emphasizes the importance of considering environmental, social, and economic factors in decision-making. • Sustainable development seeks to balance these three dimensions for long-term well-being. <p>Ecological Footprint and Personal Impact:</p> <ul style="list-style-type: none"> • The concept of ecological footprint measures the environmental impact of human activities. • Individual choices and behaviors significantly influence personal ecological footprints. <p>Ecosystem Services and Human Well-being:</p> <ul style="list-style-type: none"> • Ecosystem services provide essential benefits to humans, such as clean water, air, and food. • Disruption of ecosystem services can have adverse effects on human health, economies, and ecosystems. <p>Population Dynamics and Demographic Transition:</p>

	<ul style="list-style-type: none"> • Population growth and decline are influenced by various factors, including fertility rates, mortality rates, and migration. • The demographic transition model illustrates shifts in population patterns over time. <p>Global Population Trends and Challenges:</p> <ul style="list-style-type: none"> • The world's population continues to grow, with significant growth occurring in developing countries. • Population growth presents challenges related to resource availability, environmental sustainability, and social development. <p>Calculating and Interpreting Environmental Data:</p> <ul style="list-style-type: none"> • Tools and models, such as ecological footprint calculators and age structure diagrams, help assess and understand environmental impacts and population dynamics. • Interpreting environmental data enables informed decision-making and policy development.
Demonstration of Learning:	Pacing for Unit
	5 weeks
Unit-specific Vocabulary:	
<p>Anthropogenic, Carrying Capacity, Demography, Demographic Transition model, Ecological footprint, Ecosystem services, Interdisciplinary, Age structure diagrams, Renewable and nonrenewable resources, Replacement value, Rule of 70, Sustainability, Survivorship curves, Total Fertility Rate, Tragedy of the commons, Triple bottom line.</p>	
Anticipated misconceptions:	
<ul style="list-style-type: none"> • Misconception: Natural resources are infinite and will never run out. <ul style="list-style-type: none"> ○ Clarification: Natural resources are finite, meaning there is a limited supply. While some resources can be replenished over time (renewable), others are limited (non-renewable) and can be depleted. • Misconception: Sustainability only refers to environmental conservation. <ul style="list-style-type: none"> ○ Clarification: Sustainability encompasses environmental, social, and economic dimensions. It involves meeting the needs of the present without compromising the ability of future generations to meet their own needs, which requires balancing environmental health, social equity, and economic prosperity. • Misconception: Environmental issues are only caused by human activities. <ul style="list-style-type: none"> ○ Clarification: While human activities contribute significantly to environmental problems, natural processes and phenomena also play a role. Understanding the interactions between human actions and natural systems is crucial for effective environmental management. • Misconception: Environmental science is solely about ecology and biology. <ul style="list-style-type: none"> ○ Clarification: Environmental science is interdisciplinary and incorporates knowledge from various fields, including biology, chemistry, physics, sociology, economics, and political science. It explores the complex relationships between humans and the environment. • Misconception: Sustainable development means sacrificing economic growth. <ul style="list-style-type: none"> ○ Clarification: Sustainable development seeks to balance environmental, social, and economic goals. It emphasizes finding ways to achieve economic growth while minimizing negative environmental and social impacts, thus ensuring long-term prosperity. • Misconception: Ecological footprint only considers carbon emissions. <ul style="list-style-type: none"> ○ Clarification: Ecological footprint calculations encompass various aspects of human consumption, including energy use, water consumption, land use, and waste generation, in addition to carbon emissions. • Misconception: Ecosystem services are only provided by natural ecosystems. <ul style="list-style-type: none"> ○ Clarification: Ecosystem services can be provided by both natural and human-altered ecosystems. For 	

- example, urban green spaces can provide benefits such as air purification and flood control.
- **Misconception:** Human population growth is the sole driver of environmental degradation.
 - **Clarification:** While population growth is a significant factor, consumption patterns, technological advancements, and socio-economic factors also influence environmental impact. Addressing consumption habits and promoting sustainable practices are essential alongside population management.
 - **Misconception:** The demographic transition model predicts population growth for all countries.
 - **Clarification:** The demographic transition model describes historical population changes in industrialized nations. However, its applicability to developing countries may vary due to unique cultural, economic, and social factors.
 - **Misconception:** Age structure diagrams only represent population size.
 - **Clarification:** Age structure diagrams provide information about population structure, including the distribution of age groups and implications for future population trends. They help identify factors such as birth rates, death rates, and population momentum.

Differentiation through *Universal Design for Learning*

UDL Indicator	Teacher Actions:
Representation: Highlight patterns, critical features, big ideas, and relationships	<ul style="list-style-type: none"> ● Highlight or emphasize key elements in text, graphics, diagrams, formulas ● Use outlines, graphic organizers, unit organizer routines, concept organizer routines, and concept mastery routines to emphasize key ideas and relationships ● Use multiple examples and non-examples to emphasize critical features ● Use cues and prompts to draw attention to critical features ● Highlight previously learned skills that can be used to solve unfamiliar problems

Supporting Multilingual/English Learners

Related <i>CELP standards:</i>	Learning Targets:
<p>*The CELP guidance is to support the development of language; access to course content expectations should not change as a result of MLL status.</p> <p>I can explain the overall arching environmental goal of sustainability and sustainable development.</p> <p>An EL can conduct research and evaluate and communicate findings to answer questions or solve problems.</p> <ul style="list-style-type: none"> ● Level 1: I can recognize the main idea of sustainability and sustainable development using simple words and pictures. ● Level 2: I can recognize and explain the main idea of sustainability and sustainable development using simple words and pictures. ● Level 3 I can describe what sustainability and sustainable development mean and why they are important for protecting the environment and people’s future. ● Level 4: I can describe what sustainability and sustainable development mean and why they are important for protecting the environment and people’s future. I can use examples to explain. ● Level 5: I can explain the concepts of sustainability and sustainable development in detail, including their goals and why they are important. I can discuss the interconnectedness of environmental, social, and economic factors in achieving sustainability. I can give examples and provide evidence to support my explanations. 	

Lesson Sequence	Learning Target	Success Criteria/Assessment/Resources

<p>1 State of the Earth</p>	<p>I can explain how natural resources are important to human life.</p> <p>I can explain the overall arching environmental goal of sustainability and sustainable development.</p> <p>I can diagnose and illustrate the pressures on the global environment.</p>	<ul style="list-style-type: none"> ● I can define both abiotic and biotic factors ● I can define the term in environment ● I can describe why environmental science is considered interdisciplinary. ● I can list a minimum of 5 pressures that humans are placing on the environment. ● I can explain the Triple Bottom Line theory ● I can define the term sustainability ● I can explain why sustainability is difficult with the current state of the Earth
<p>2 Ecological Footprint</p>	<p>I can describe the concept of our ecological footprint and what human activities impact our footprint.</p>	<ul style="list-style-type: none"> ● I can calculate my ecological footprint using multiple footprint calculation tools. ● I can define what our Ecological footprint is and how our daily choices affect this. ● I can identify what countries have the highest ecological footprints. ● I can explain how affluence affects the environment
<p>3 Ecosystem Services</p>	<p>I can describe how anthropogenic activities can disrupt ecosystem services, potentially resulting in economic and ecological consequences.</p> <p>I can describe ecosystem services</p>	<ul style="list-style-type: none"> ● I can define ecosystem services ● I can list a minimum of 5 ecosystem services ● I can describe the results of human disruptions to ecosystem services.
<p>4 Tragedy of Commons</p>	<p>I can model the Tragedy of the Commons phenomenon and apply this concept to current environmental issues.</p>	<ul style="list-style-type: none"> ● I can calculate my ecological footprint using multiple footprint calculation tools. ● I can define what our ecological footprint is and how our daily choices affect this. ● I can identify what countries have the highest ecological footprints.
<p>5 Human Population</p>	<p>I can demonstrate how resource availability affects population growth.</p> <p>I can interpret age structure diagrams.</p> <p>I can evaluate factors that affect the total fertility rate in human populations.</p>	<ul style="list-style-type: none"> ● I can identify what the current world population is ● I can identify where the highest population growth is occurring in the world ● I can explain why population growth in developing countries is the highest in the world ● I can explain what demography is ● I can illustrate with a population pyramid and give an example of a country that is developing, transitional, or developed ● I can explain how TFR directly correlates to a country's population size ● I can identify why the world's carrying capacity has continued to increase ● I can calculate the doubling time of a country using the rule of "70"
<p>6 Demographic Transition</p>	<p>I can articulate why human populations experience growth and decline.</p> <p>I can interpret the demographic transition model and apply it to the</p>	<ul style="list-style-type: none"> ● I can explain what the demographic transition model shows about human population ● I can draw the demographic transition model ● I can graph a country's population and identify what stage of the demographic transition model it falls under.

	current status of selected developed and developing countries.	
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Unit Title:

The Living World

Relevant Standards: Bold indicates priority

All College Board Practices are infused in these lessons.

Essential Question(s):

- How does natural selection work, and what evidence supports this process?
- What are the causes of species extinction and mass extinction events, and how do they impact biodiversity?
- What are the levels of biodiversity, and why are they important?
- How do energy flow and matter cycling operate in ecosystems, and what are their implications for ecological dynamics?

Enduring Understanding(s):**Natural Selection and Adaptation:**

- Natural selection is a key mechanism driving evolution, where organisms with advantageous traits are more likely to survive and reproduce.
- Adaptations are inherited traits that increase an organism's fitness for its environment, allowing it to better survive and reproduce.

Biodiversity and Conservation:

- Biodiversity refers to the variety of life forms present on Earth, including genetic, species, and ecosystem diversity.
- Biodiversity hotspots are areas with high levels of species richness and endemism, and they are crucial for maintaining global biodiversity.
- Human activities, such as habitat destruction, pollution, and climate change, are major contributors to the ongoing sixth mass extinction event.

Population Dynamics and Interactions:

- Populations exhibit characteristics and behaviors that help predict their dynamics, including growth patterns and distribution.
- Limiting factors, such as resource availability and competition, influence population growth and distribution.

Ecosystem Structure and Function:

- Ecosystems are the result of biotic and abiotic interactions, where organisms interact with each other and their environment to form complex ecological communities.
- Energy flows through ecosystems via trophic levels, with energy decreasing as it moves up the food chain due to inefficiencies in energy transfer.
- Matter cycles through ecosystems via biogeochemical cycles, such as the carbon, nitrogen, and water cycles, which are vital for maintaining ecosystem balance.

Succession and Biomes:

- Ecological succession involves the sequential changes in species composition and community structure following disturbances, leading to the establishment of climax communities.
- Terrestrial and aquatic biomes are characterized by specific environmental factors, such as climate and

	<p>vegetation, and exhibit distinct distribution patterns across the globe.</p> <ul style="list-style-type: none"> • Human activities are altering the distribution and composition of biomes worldwide, leading to habitat loss and fragmentation. <p>Biogeochemical Cycles and Human Impact:</p> <ul style="list-style-type: none"> • Biogeochemical cycles regulate the movement and transformation of elements, such as carbon, nitrogen, and phosphorus, between living organisms and their environment. • Human activities, including deforestation, fossil fuel combustion, and agricultural practices, disrupt biogeochemical cycles, leading to environmental degradation and climate change.
Demonstration of Learning:	Pacing for Unit
	6 weeks
Unit-specific Vocabulary:	
<p>Biodiversity, Biodiversity hotspot, Biogeochemical cycles, Biome, Climatogram, Density dependent factors, Density independent factors, Energy flow, Eutrophication, Exponential vs. logistic growth, Island biogeography, Keystone species, Positive and negative feedback loops, Primary and secondary succession, Trophic levels.</p>	
Anticipated misconceptions:	
<ul style="list-style-type: none"> • Misconception: Natural selection only occurs when an organism needs a specific trait. <ul style="list-style-type: none"> ○ Clarification: Natural selection acts on existing variations within a population. Traits that increase an organism's chances of survival and reproduction are more likely to be passed on to the next generation. • Misconception: Extinction only occurs because of predators. <ul style="list-style-type: none"> ○ Clarification: Extinction can result from various factors, including changes in climate, habitat loss, competition, disease, and human activities such as hunting or habitat destruction. • Misconception: Biodiversity is only about the number of species in an area. <ul style="list-style-type: none"> ○ Clarification: Biodiversity encompasses genetic diversity, species diversity, and ecosystem diversity. It includes the variety of life forms and their interactions within an ecosystem. • Misconception: The sixth mass extinction event is natural and not influenced by human activities. <ul style="list-style-type: none"> ○ Clarification: The current mass extinction event is primarily caused by human activities such as habitat destruction, pollution, over-harvesting, and climate change. • Misconception: Conservation efforts always succeed in preserving biodiversity. <ul style="list-style-type: none"> ○ Clarification: Conservation efforts can face challenges such as insufficient funding, lack of political will, and conflicts with human interests. Success depends on effective management strategies and community involvement. • Misconception: Adaptations are acquired during an organism's lifetime. <ul style="list-style-type: none"> ○ Clarification: Adaptations are inherited traits that have evolved over many generations through natural selection. They are not acquired within an organism's lifetime. • Misconception: Trophic levels in a food chain represent distinct categories of organisms. <ul style="list-style-type: none"> ○ Clarification: Trophic levels represent energy transfer within a food chain, with each level containing organisms that share similar positions in the food web, such as producers, primary consumers, secondary consumers, etc. • Misconception: Exponential population growth continues indefinitely. <ul style="list-style-type: none"> ○ Clarification: Exponential growth occurs when resources are unlimited, but it eventually levels off due to factors like resource limitation, competition, and environmental constraints, leading to logistic growth. • Misconception: All human impacts on the environment are negative. <ul style="list-style-type: none"> ○ Clarification: While many human activities have negative environmental impacts, some practices, like 	

- sustainable resource management and conservation efforts, can have positive effects on ecosystems.
- Misconception: The carbon cycle only involves carbon dioxide.
 - Clarification: The carbon cycle involves various forms of carbon, including carbon dioxide (CO₂), methane (CH₄), and organic carbon. It encompasses processes like photosynthesis, respiration, decomposition, and combustion.
- Misconception: Positive feedback loops are always beneficial.
 - Clarification: Positive feedback loops can amplify changes within a system, but they are not always advantageous. For example, in the case of global warming, the melting of polar ice leads to increased absorption of solar radiation, further accelerating ice melt, which is detrimental to ecosystems and sea levels.

Differentiation through *Universal Design for Learning*

UDL Indicator	Teacher Actions:
Representation: Highlight patterns, critical features, big ideas, and relationships	<ul style="list-style-type: none"> ● Highlight or emphasize key elements in text, graphics, diagrams, formulas ● Use outlines, graphic organizers, unit organizer routines, concept organizer routines, and concept mastery routines to emphasize key ideas and relationships ● Use multiple examples and non-examples to emphasize critical features ● Use cues and prompts to draw attention to critical features ● Highlight previously learned skills that can be used to solve unfamiliar problems

Supporting Multilingual/English Learners

Related <i>CELP standards:</i>	Learning Targets:
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**The CELP guidance is to support the development of language; access to course content expectations should not change as a result of MLL status.*

I can argue that many environmental issues arise from anthropogenic disruption of the biogeochemical cycles producing positive feedback loops

An EL can conduct research and evaluate and communicate findings to answer questions or solve problems.

- Level 1: I can understand and explain how human actions cause environmental problems.
- Level 2: I can identify simple examples of how people can help the environment, like recycling or planting trees.
- Level 3 I can describe how human activities impact the environment, causing problems like pollution and changes in weather.
- Level 4: I can discuss how changes in weather, like floods or droughts, can be caused by human actions, such as cutting down forests or using too much water.
- Level 5: I can argue that human activities, like burning fossil fuels and deforestation, lead to environmental problems by disrupting the natural cycles of elements, creating positive feedback loops.

Lesson Sequence	Learning Target	Success Criteria/ Assessment	Resources
1 Biodiversity and Natural Selection	<p>I can explain the process of natural selection and cite evidence for this process</p> <p>I can analyze reasons for species extinction and mass extinction events</p>	<ul style="list-style-type: none"> ● I can explain the different levels of biodiversity ● I can identify who the father of natural selection was and what his early experiments involved. ● I can demonstrate the process of natural selection by completing the lab. ● I can define what adaptations are and describe how 	

		<p>they affect natural selection.</p> <ul style="list-style-type: none"> ● I can explain what a biodiversity hotspot is and why these are important to the environment ● I can identify what is causing the 6th mass extinction even currently. ● I can identify the efforts that are being made to conserve biodiversity and why often they fail. ● I can describe how organisms adapt to their environment.
<p>2 Food webs and energy flow</p>	<p>I can explain how solar energy is acquired and transferred by living organisms.</p> <p>I can model how energy flows and matter cycles through trophic levels.</p> <p>I can argue that the energy decreases as it flows through ecosystems.</p>	<ul style="list-style-type: none"> ● I can explain the process of photosynthesis and why it is important to the base of the trophic pyramid ● I can define the terms autotroph and heterotroph ● I can apply the 10% rule using tangible levels of energy given in Joules ● I can illustrate a complex food web of a given ecosystem. ● I can differentiate between a food chain and a food web. ● I can illustrate the flow of energy in a food chain or food web.
<p>3 Population Ecology</p>	<p>I can explain how limiting factors restrain population growth</p> <p>I can describe how populations exhibit characteristics that help predict their dynamics</p> <p>I can differentiate between exponential and logistic population growth.</p>	<ul style="list-style-type: none"> ● I can explain the difference between logistical and exponential growth ● I can illustrate the difference between logistical and exponential growth using a graph. ● I can explain the difference between random, clumped, and uniform population distribution ● I can predict what happens to a population that is not restrained by limiting factors. ● I can select 3 density dependent factors ● I can select 3 density-independent factors ● I can differentiate between the characteristics of K and R selected species. ● I can calculate the biodiversity of an area using the Shannon-Wiener index ● I can estimate a population by using the mark and recapture method
<p>4 Species Interactions</p>	<p>I can assess how the availability of resources influences species interactions.</p> <p>I can model how ecosystems are the result of biotic and abiotic interactions.</p> <p>I can predict the potential impacts of invasive species in communities</p>	<ul style="list-style-type: none"> ● I can discuss what a keystone species is and its importance to an ecosystem. ● I can identify the concept of dieback and off-shoot on a population graph of a predator-prey relationship. ● I can explain the concept of Island Biogeography and how that changes a population ● I can explain how each species interaction has either a positive, negative or zero effect on the other species.
<p>5 Biomes</p>	<p>I can classify the global distribution and principal environmental aspects of terrestrial biomes.</p> <p>I can describe the global distribution and</p>	<ul style="list-style-type: none"> ● I can identify the 2 characteristics that identify a biome ● I can identify a particular region across the world for each of the biomes I defined in class. ● I can explain the different zones found in a

	principal environmental aspects of aquatic biomes.	<p>freshwater lake.</p> <ul style="list-style-type: none"> ● I can interpret a climatogram to identify biomes when given climatic data. ● I can explain how the distribution of vegetation changes from the equator to the poles. ● I can identify the major terrestrial biomes and a species that is found in each. ● I can research how human impacts are changing the distribution of biomes world wide.
6 Primary and Secondary Succession	I can differentiate between primary and secondary succession	<ul style="list-style-type: none"> ● I can compare and contrast two major types of ecological succession. ● I can explain what a pioneer species is and how it is different between the two types of succession. ● I can illustrate in a diagram the difference between primary and secondary succession. ● I can explain what a climax community is and the types of species that can be found in one.
7 Biogeochemical Cycles	<p>I can explain the steps and reservoir interactions in the nitrogen cycle.</p> <p>I can explain the steps and reservoir interactions in the hydrologic cycle.</p> <p>I can explain the steps and reservoir interactions in the carbon cycle.</p> <p>I can explain how humans are impacting each of the major biogeochemical cycles.</p> <p>I can argue that many environmental issues arise from anthropogenic disruption of the biogeochemical cycles producing positive feedback loops</p>	<ul style="list-style-type: none"> ● I can explain why the process of nitrogen fixation is critical in vegetation ● I can identify where most of the nitrogen in the world is stored. ● I can argue the sun is the source of energy for the water cycle. ● I can illustrate the different processes found in the water cycle. ● I can classify the water distribution on Earth in terms of saltwater and freshwater. ● I can identify the major carbon sinks ● I can research how humans disrupting the carbon cycle ● I can identify where most of the phosphorus is stored on Earth and what process releases this from rock. ● I can argue that the process of eutrophication is caused by a disruption to the natural cycling of nitrogen and phosphorus.
8 Feedback Loops	I can differentiate the fundamental differences between positive and negative feedback loops.	<ul style="list-style-type: none"> ● I can explain what a positive feedback loop is an given an example ● I can explain what a negative feedback loop is and give an example

Unit Title:	
Land Use	
Relevant Standards: Bold indicates priority	
All College Board Practices are infused in these lessons.	
Essential Question(s):	Enduring Understanding(s):
<ul style="list-style-type: none"> • How do geological processes at convergent, divergent, and transform plate boundaries shape Earth's surface? • What are the relationships between plate tectonics, soil formation, and erosion? • How do agricultural practices impact soil health and sustainability? • What are the environmental impacts of different methods of meat production and aquaculture? • How does urbanization affect the environment and what strategies can promote sustainable cities? 	<ul style="list-style-type: none"> • Earth's Dynamic Surface: Students will understand that Earth's surface is constantly changing due to geological processes such as plate tectonics, weathering, and erosion, which shape the landscape over long periods of time. • Interconnectedness of Earth Systems: Students will recognize the interconnectedness between geological processes, soil formation, agricultural practices, and environmental sustainability, understanding how changes in one system can affect others. • Human Impact on the Environment: Students will comprehend the significant impact of human activities, such as agriculture, urbanization, and resource extraction, on the environment, including soil degradation, habitat loss, and pollution. • Importance of Sustainability: Students will appreciate the importance of sustainable practices in agriculture, urban planning, and resource management for preserving natural resources, protecting biodiversity, and maintaining ecosystem health. • Complexity of Food Systems: Students will recognize the complexity of food production systems, including the environmental impacts of different methods of meat production, aquaculture, and agricultural practices, and understand the importance of making informed choices for sustainable food systems. • Urbanization and Sustainable Development: Students will understand the challenges and opportunities associated with urbanization, including its effects on land use, transportation, and the water and carbon cycles, and the importance of promoting sustainable urban development strategies. • Environmental Stewardship: Students will develop a sense of environmental stewardship, recognizing their role in protecting Earth's natural resources and ecosystems, and advocating for sustainable practices in their communities and beyond.
Demonstration of Learning:	Pacing for Unit

8 weeks

Unit-specific Vocabulary:

Agriculture, Clearcutting, Concentrated Animal Feeding Operation, Crop yield, Erosion, Extraction, Genetically modified organism, Green revolution, Integrated Pest Management, Loam, Monoculture, Ore, Organic, Pesticide, Plate boundaries, Plate tectonics, Prescribed burns, Selective burns, SMART growth, Soil Triangle, Synthetic Fertilizer, Tillage, Urban Sprawl, Urbanization, Weathering.

Anticipated misconceptions:

- Misconception: Weathering and erosion are the same thing.
 - Clarification: Weathering refers to the breakdown of rocks into smaller pieces by physical, chemical, or biological processes, while erosion involves the transport of these weathered materials by agents such as water, wind, or ice.
- Misconception: All agricultural practices contribute to soil degradation.
 - Clarification: While some agricultural practices, such as excessive tilling or monoculture farming, can lead to soil degradation, others, like no-till farming or cover cropping, help improve soil health and reduce erosion.
- Misconception: Urbanization only affects cities and has no impact on rural areas.
 - Clarification: Urbanization can have far-reaching effects beyond cities, including changes in land use, water quality, and biodiversity, which can impact both urban and rural areas.
- Misconception: Genetically modified organisms (GMOs) are always harmful to the environment.
 - Clarification: While there are concerns about GMOs, such as potential impacts on biodiversity or increased pesticide use, they can also offer benefits such as increased crop yields and reduced chemical inputs.
- Misconception: Aquaculture is always more sustainable than wild-caught fishing.
 - Clarification: While aquaculture can reduce pressure on wild fish populations, it can also have negative environmental impacts, such as pollution, habitat destruction, and disease transmission, which need to be carefully managed.
- Misconception: All mining practices result in significant environmental damage.
 - Clarification: While some mining practices, like mountaintop removal mining, can cause extensive environmental damage, others, such as underground mining with proper reclamation, can minimize impacts and restore ecosystems.
- Misconception: Prescribed burns always harm ecosystems and wildlife.
 - Clarification: Prescribed burns are carefully planned and controlled fires used to manage ecosystems and reduce the risk of wildfires. When conducted properly, they can promote ecosystem health, restore habitats, and reduce the risk of catastrophic wildfires.
- Misconception: Sustainable cities are only concerned with environmental issues.
 - Clarification: Sustainable cities address not only environmental concerns but also social and economic factors, including equity, public health, and economic prosperity, to create livable and resilient communities.
- Misconception: Soil conservation practices are unnecessary because soil is abundant and renewable.
 - Clarification: While soil is a renewable resource, it forms slowly over thousands of years and can be easily degraded by erosion, pollution, and poor land management practices. Soil conservation is essential for maintaining soil health and productivity for future generations.
- Misconception: The Green Revolution solved all global food production challenges.
 - Clarification: While the Green Revolution led to significant increases in crop yields, it also had unintended consequences such as increased dependence on chemical inputs, loss of biodiversity, and environmental degradation, highlighting the need for more sustainable agricultural practices.

Differentiation through *Universal Design for Learning*

UDL Indicator

Teacher Actions:

Representation: Highlight patterns, critical features, big

- Highlight or emphasize key elements in text,

ideas, and relationships	<p>graphics, diagrams, formulas</p> <ul style="list-style-type: none"> ● Use outlines, graphic organizers, unit organizer routines, concept organizer routines, and concept mastery routines to emphasize key ideas and relationships ● Use multiple examples and non-examples to emphasize critical features ● Use cues and prompts to draw attention to critical features ● Highlight previously learned skills that can be used to solve unfamiliar problems
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Supporting Multilingual/English Learners

Related **CELP standards:**

Learning Targets:

**The CELP guidance is to support the development of language; access to course content expectations should not change as a result of MLL status.*

An EL can conduct research and evaluate and communicate findings to answer questions or solve problems.

I can research the effects of urbanization on the environment.

- Level 1: With prompting and support, I can explore how urbanization affects the environment by looking at a few pictures and listening to a short story.
- Level 2: With prompting and support, I can learn about how urbanization impacts the environment by reading a provided article and watching a short video.
- Level 3: With guidance and support, I can investigate the effects of urbanization on the environment by reading multiple articles and watching videos from reliable sources. I will summarize what I learn in a short report, including pictures or drawings to illustrate key points, and list the sources I used.
- Level 4: I can research and analyze the effects of urbanization on the environment by gathering information from various sources such as articles, books, and documentaries. Using effective search terms, I will evaluate the reliability of each source, integrate the information into a well-organized report, and cite my sources correctly.
- Level 5: I can conduct thorough research on the effects of urbanization on the environment by analyzing information from diverse sources including scholarly articles, government reports, and expert interviews. Using advanced search terms, I will critically evaluate the reliability of each source, analyze and synthesize the information to form a coherent argument, and present my findings in a well-structured and properly cited written report.

Lesson Sequence	Learning Target	Success Criteria/ Assessment	Resources
1 Geosphere	<p>I can breakdown the geological changes and events that occur at convergent, divergent, and transform plate boundaries</p> <p>I can explain how the geological processes have resulted in an ever-changing landscape.</p>	<ul style="list-style-type: none"> ● I can illustrate the ring of fire on a map of the world ● I can predict the landforms that are formed at each type of plate boundary. ● I can indicate the movements that occur at each type of plate boundaries. ● I can conclude how plate tectonics shape the earth beneath our feet. ● I can model the mechanical layers of the Earth ● I can show how matter is recycled inside of the Earth ● I can differentiate between weathering and erosion. 	

<p>2 Soils</p>	<p>I can describe the characteristics and formation of soil.</p> <p>I can connect the importance of soils to agricultural practices</p> <p>I can describe the impacts of agriculture on soils.</p> <p>I can compare and contrast the properties of different soil types.</p>	<ul style="list-style-type: none"> ● I can appraise soil for its health ● I can calculate the type of soil present using the soil type pyramid. ● I can diagram the layers present in a soil profile ● I can describe the importance of soils in terms of agriculture. ● I can articulate causes of soil degradation. ● I can explain how humans are increasing soil degradation around the world. ● I can predict the soil types in loam ● I can explain how we protect soils and why it is important we do so.
<p>3 Agriculture</p>	<p>I can outline the major historical developments in agriculture.</p> <p>I can evaluate agricultural practices for their ecological impact.</p> <p>I can explain how the green revolution allowed us to feed our world's growing population.</p>	<ul style="list-style-type: none"> ● I can explain the different types of irrigation systems used on farms and which system conserves water the best. ● I can differentiate between no-till and tilling farming ● I can argue for or against different farming techniques used to protect soils and promote successful growing seasons. ● I can explain what an organic fertilizer is and its benefits. ● I can explain what non-organic fertilizer provides to the soil ● I can construct an opinion in the debate over genetically modified food ● I can evaluate how we preserve crop diversity ● I can categorize and explain the different strategies of pest management.
<p>4 Meat Production</p>	<p>I can identify different methods of meat production.</p> <p>I can evaluate the benefits and drawbacks of different methods of meat production</p>	<ul style="list-style-type: none"> ● I can explain what a CAFO is and why they are used around the world. ● I can explain how our food choices also involve different amounts of energy input. ● I can determine what meat sources require the most land. ● I can reflect on how seeing documentaries about meat production has changed my outlook on food selection. ● I can explain how the consumption of meat has more of an impact on the environment than vegetarian options. ● I can propose changes to the way we provide food to increase sustainability
<p>5 Aquaculture</p>	<p>I can discuss causes of and problems related to overfishing.</p> <p>I can determine the positives and negatives to using aquaculture to feed our world's growing population.</p>	<ul style="list-style-type: none"> ● I can explain how aquaculture provides food security. ● I can identify the potential problems associated with aquaculture. ● I can classify which fishing technique damages the aquatic ecosystem the most ● I can propose the best way to prevent overfishing in our waterways. ● I can evaluate whether or not aquaculture is a smart

		alternative to wild caught fish
6 Mining	I can link the extraction of natural resources to land degradation.	<ul style="list-style-type: none"> ● I can explain the difference between ore and gangue minerals. ● I can discuss how the extraction of natural resources causes water pollution. ● I can model how mining reclamation is an important step to reclaiming a productive environment. ● I can differentiate between surface and underground mining.
7 Forestry	<p>I can predict the effect of clearcutting on forests.</p> <p>I can evaluate the fundamentals of forest management and describe the methods of harvesting timber.</p>	<ul style="list-style-type: none"> ● I can explain what ecosystem services are provided by forest. ● I can discuss how the national park system was designed to promote biodiversity. ● I can assess how habitat fragmentation affects wildlife. ● I can evaluate the different types of timber harvesting techniques used. ● I can show how clear cutting affects erosion. ● I can argue why prescribed burns are used in many parts of the United States.
8 Urbanization	<p>I can research the effects of urbanization on the environment.</p> <p>I can explain city and regional planning, along with land use strategies.</p> <p>I can justify the pursuit of sustainable cities.</p>	<ul style="list-style-type: none"> ● I can explain how the water cycle is affected by urbanization. ● I can explain how urbanization affects the carbon cycle. ● I can define urban sprawl ● I can assess strategies used by both city and regional planners. ● I can justify why public transportation is important during urbanization. ● I can argue the role that urban parks and green spaces play in cities. ● I can exemplify what “new urbanism” is. ● I can explain how urbanization affects human health. ● I can describe the difference in population density between urban centers and rural areas. ● I can propose the components to a sustainable city.

Unit Title:

Energy Resources

Relevant Standards: Bold indicates priority

All College Board Practices are infused in these lessons.

Essential Question(s):

- How do fossil fuels compare in meeting societal energy needs, and what are the social, environmental, and economic implications of their usage?
- What are the formation processes and extraction methods of coal, natural gas, oil, and oil shale/tar sands, and how do they differ in their energy content?
- How do intermediate energy sources such as nuclear, biomass, and damming/water compare to fossil fuels, and what are their potential roles in transitioning to renewable energy?
- What are the social, environmental, and economic implications of renewable energy sources such as wind, solar, geothermal, and ocean energy, and how do they compare to fossil fuels?
- How do the costs and benefits of different energy sources, including fossil fuels, intermediate, and renewable sources, compare, and what are the implications for energy policy and decision-making?

Enduring Understanding(s):

Fossil Fuels:

- Fossil fuels are essential energy sources that have significant social, environmental, and economic impacts.
- The extraction, processing, and usage of fossil fuels vary, and each type has distinct benefits and drawbacks.
- Fossil fuels are finite resources and contribute to environmental degradation and climate change.
- Society's reliance on fossil fuels necessitates a balanced understanding of their role and the need for sustainable alternatives.

Formation and Extraction:

- Understanding the formation processes and extraction methods of fossil fuels helps explain their availability, energy content, and environmental impacts.
- Coal, natural gas, oil, and oil shale/tar sands have unique properties and require different extraction techniques.
- Extraction of fossil fuels often leads to environmental degradation, habitat destruction, and pollution.
- Variations in energy content among fossil fuels influence their suitability for different applications.

Intermediate Energy Sources:

- Intermediate energy sources like nuclear, biomass, and hydropower offer alternatives to fossil fuels with differing benefits and challenges.
- These sources provide a transition towards renewable energy while addressing some limitations of fossil fuels.
- Intermediate energy sources have diverse social, environmental, and economic impacts that require careful consideration.
- Balancing energy needs with environmental sustainability is crucial in evaluating the role of intermediate energy sources.

Renewable Energy:

- Renewable energy sources offer sustainable alternatives to fossil fuels with minimal environmental impact and long-term viability.
- Wind, solar, geothermal, and ocean energy sources

	<p>harness natural processes to generate clean energy.</p> <ul style="list-style-type: none"> • Renewable energy technologies continue to advance, making them increasingly competitive and accessible. • Transitioning to renewable energy requires understanding and addressing challenges such as intermittency, energy storage, and infrastructure development. <p>Cost-Benefit Analysis and Policy Implications:</p> <ul style="list-style-type: none"> • Evaluating the costs and benefits of different energy sources informs policy decisions and energy planning. • Energy policies should prioritize sustainability, affordability, reliability, and environmental stewardship. • Balancing short-term economic gains with long-term environmental and social impacts is essential in energy decision-making. • Sustainable energy policies require collaboration between governments, industries, communities, and individuals to achieve common goals.
Demonstration of Learning:	Pacing for Unit
	7
Unit-specific Vocabulary:	
<p>Anthracite, Bituminous, Biofuels, Carbon neutral, Energy crops, Flaring, Fuel rods, Hydrocarbon, Hydrofracking, Methane digester, Moderator, Natural gas, Non-renewable Resource, Nuclear chain reaction, Nuclear fission, Oil, Peat, Petroleum, Primary extraction, Renewable Resource, Run-of-the-river dam, Secondary extraction, Synthetic fuels, Turbine.</p>	
Anticipated misconceptions:	
<ul style="list-style-type: none"> • Misconception: Fossil fuels are inexhaustible resources. <ul style="list-style-type: none"> ○ Clarification: Fossil fuels are formed over millions of years and are considered non-renewable because they are consumed much faster than they can be replenished. • Misconception: Fossil fuels have no alternatives. <ul style="list-style-type: none"> ○ Clarification: While fossil fuels have been the primary energy source, there are renewable and intermediate energy sources available as alternatives, each with its own benefits and drawbacks. • Misconception: Fossil fuels are clean energy sources. <ul style="list-style-type: none"> ○ Clarification: Fossil fuels, when burned, release pollutants such as carbon dioxide, sulfur dioxide, and nitrogen oxides, contributing to air pollution and climate change. • Misconception: Nuclear energy is entirely safe and has no environmental impacts. <ul style="list-style-type: none"> ○ Clarification: While nuclear energy produces low greenhouse gas emissions, it poses risks such as radioactive waste and the potential for accidents like Chernobyl and Fukushima. • Misconception: Biomass energy is always sustainable and eco-friendly. <ul style="list-style-type: none"> ○ Clarification: While biomass can be a renewable energy source, unsustainable practices like deforestation for fuel can lead to habitat loss and biodiversity decline. • Misconception: Hydropower dams have no negative environmental consequences. <ul style="list-style-type: none"> ○ Clarification: While hydropower is renewable, dam construction can disrupt ecosystems, alter river flow, and displace communities, impacting aquatic habitats and biodiversity. • Misconception: Renewable energy sources are always available and reliable. <ul style="list-style-type: none"> ○ Clarification: While renewable energy is abundant, its availability can vary based on factors like weather 	

and geography, requiring solutions for intermittency and energy storage.

- Misconception: Renewable energy technologies are expensive and impractical.
 - Clarification: Advances in technology have made renewable energy increasingly cost-competitive, with declining costs for solar, wind, and other renewables.
- Misconception: Renewable energy can fully replace fossil fuels overnight.
 - Clarification: Transitioning to renewable energy requires significant infrastructure investment, policy support, and societal changes, which will take time and effort.
- Misconception: Environmental regulations and renewable energy incentives hinder economic growth.
 - Clarification: Well-designed policies can stimulate innovation, create jobs, and drive economic growth while protecting the environment and public health.
- Misconception: Energy independence means reliance solely on domestic fossil fuel production.
 - Clarification: True energy independence involves diversifying energy sources, reducing dependence on fossil fuels, and investing in domestic renewable energy resources.
- Misconception: Energy policy is solely the responsibility of governments.
 - Clarification: Energy policy requires collaboration between governments, industries, communities, and individuals to address challenges and achieve sustainable energy goals.

Differentiation through *Universal Design for Learning*

UDL Indicator

Representation: Highlight patterns, critical features, big ideas, and relationships

Teacher Actions:

- Highlight or emphasize key elements in text, graphics, diagrams, formulas
- Use outlines, graphic organizers, unit organizer routines, concept organizer routines, and concept mastery routines to emphasize key ideas and relationships
- Use multiple examples and non-examples to emphasize critical features
- Use cues and prompts to draw attention to critical features
- Highlight previously learned skills that can be used to solve unfamiliar problems

Supporting Multilingual/English Learners

Related *CELP standards:*

Learning Targets:

*The CELP guidance is to support the development of language; access to course content expectations should not change as a result of MLL status.

An EL can conduct research and evaluate and communicate findings to answer questions or solve problems.

I can articulate the social, environmental, and economic benefits and drawbacks of each of the renewable energy usages

- Level 1: With prompting and support, I can identify some social, environmental, and economic benefits and drawbacks of renewable energy usages.
- Level 2: With prompting and support, I can gather information from provided sources to list some social, environmental, and economic benefits and drawbacks of renewable energy usages.
- Level 3: With guidance and support, I can conduct short research to evaluate provided sources, and describe the social, environmental, and economic benefits and drawbacks of renewable energy usages.
- Level 4: I can conduct research to evaluate various sources, and explain the social, environmental, and economic benefits and drawbacks of renewable energy usages.
- Level 5: I can conduct in-depth research, analyzing multiple sources to critically assess the social, environmental, and economic benefits and drawbacks of renewable energy usages, and propose recommendations based on my findings.

Lesson Sequence	Learning Target	Success Criteria/ Assessment
1	<p>I can compare and contrast the ways each fossil fuels are used in providing energy to meet the needs of society</p> <p>I can articulate the social, environmental, and economic benefits and drawbacks of each of the fossil fuel usages</p> <p>I can articulate the social, environmental, and economic benefits and drawbacks of each of the fossil fuel usages</p>	<ul style="list-style-type: none"> ● I can explain why fossil fuels are considered non-renewable ● I can illustrate coal was formed and explain how it is extracted and used for energy ● I can differentiate the different types of coal and the amount of energy held in each ● I can illustrate how natural gas was formed and explain how it is extracted and used for energy ● I can illustrate how oil was formed and explain how it is extracted and used for energy ● I can illustrate how oil shale/tar sands were formed and explain how it is extracted and used for energy ● I can analyze the impacts coal usage has on the environment, economy, and society ● I can analyze the impacts natural gas usage has on the environment, economy, and society ● I can analyze the impacts that oil usage has on the environment, economy, and society ● I can analyze the impacts tar sands/oil shale has on the environment, economy, and society ● I can analyze current data on fossil fuel production and consumption by country and determine implications of this ● I can conduct a cost -benefit analysis to compare and contrast the suitability of each of the fossil fuel usages.
2	<p>I can compare and contrast the ways in which “intermediate” energy sources such as damming/water, nuclear, and biomass</p> <p>I can articulate the social, environmental, and economic benefits and drawbacks of each of the intermediate energy sources usages</p> <p>I can evaluate whether or not intermediate energy sources can help bridge transition from fossil fuels to eventually renewable energy</p>	<ul style="list-style-type: none"> ● I can explain why nuclear, biomass, and dams are considered intermediate on the renewability scale ● can illustrate how nuclear power is generated and explain how it is used for energy. ● I can illustrate how damming of water generates energy and how it is used. ● I can illustrate how different types of biomass, including crops/plants, animals, and waste generate energy and how it is used. ● I can analyze the impacts and risks of using nuclear energy to the environment, society and the economy ● I can analyze the impacts of damming water sources for energy on the environment, society and the economy ● I can analyze the impacts of using biomass energy on the environment, society and the economy. ● I can conduct a cost benefit analysis to compare and contrast the suitability of each intermediate energy source. ● I can argue for or against the use of intermediate energy sources
3	<p>I can compare and contrast the ways renewable energy sources are used in</p>	<ul style="list-style-type: none"> ● I can explain why wind, solar, geothermal, and ocean energy sources are considered renewable, along

	<p>providing energy to meet the needs of society</p> <p>I can articulate the social, environmental, and economic benefits and drawbacks of each of the renewable energy usages</p>	<p>with any new technologies developing to provide renewable energy sources</p> <ul style="list-style-type: none"> ● I can illustrate how wind generates energy and explain how it is used ● I can illustrate how solar generates energy through both active and passive processes and explain how they are used ● I can illustrate how geothermal processes generate energy and explain how they can vary in their usages ● I can illustrate how ocean energy sources generate energy and how they are used ● I can analyze the impacts of wind energy on the environment, society and the economy. ● I can analyze the impacts of solar energy on the environment, society and the economy. ● I can analyze the impacts of geothermal energy on the environment, society and the economy. ● I can analyze the impacts of ocean energy on the environment, society and the economy. ● I can conduct a cost benefit analysis to compare and contrast the suitability of each renewable energy source.
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Unit Title:	
Land, Air, and Water Pollution	
Relevant Standards: Bold indicates priority	
All College Board Practices are infused in these lessons.	
Essential Question(s):	Enduring Understanding(s):
<ul style="list-style-type: none"> • What are the primary sources of water, air, and soil pollution, and how do they impact the environment, society, and the economy? • How can we develop effective solutions to mitigate pollution in water, air, and soil to lessen their impact on the environment, society, and the economy? • What measures can be taken to improve the efficiency and sustainability of recycling and waste management practices to reduce pollution and conserve resources? 	<ul style="list-style-type: none"> • Pollution has multifaceted impacts on the environment, society, and the economy, highlighting the interconnectedness of human activities and natural systems. • Effective solutions to pollution require interdisciplinary approaches that consider environmental, social, and economic factors. • Sustainable management of resources and waste is essential for mitigating pollution and maintaining environmental quality. • Awareness of pollution sources and impacts empowers individuals and communities to make informed decisions and advocate for positive change. • Continuous innovation and adaptation are necessary for addressing emerging pollution challenges and improving environmental stewardship. • Pollution created by human activities directly impacts ecosystems in the air, on land, and in water. The source of pollution can sometimes be easy to identify, but other times the source is diffused. There are many human health issues that can be linked to pollution. Increases in waste causes global concerns for organisms that live on land, air and in water. Air pollution can be in the form of gasses or particulates in the atmosphere and be generated by both natural and human sources. • Pollution also has negative impacts on the economy. Practices have been put in place to reduce discharges of pollution in water and air and regulate drinking water.
Demonstration of Learning:	Pacing for Unit
	7
Unit-specific Vocabulary:	
Bioaccumulation, Biomagnification, Dose response curve, Electronic waste (E-waste), Endocrine disruptors, Eutrophication, Waterborne pathogens, Landfill, Lethal dose 50% (LD50), Nonpoint source pollutant, Oceanic dead zones, Persistent organic pollutants (POPs), Point source pollutant, Recycling processes, Sewage treatment, Solid waste, Thermal pollution, Photochemical smog, Industrial smog, Primary air pollutants, Secondary air pollutants, Thermal inversion, Volatile Organic Compounds (VOCs).	

Anticipated Misconceptions:

- Misconception: Pollution only affects the environment.
 - Clarification: Pollution impacts not only the environment but also society and the economy. For example, air pollution can lead to health problems in humans (society) and economic losses due to decreased productivity and healthcare costs (economy).
- Misconception: Pollution is solely caused by industrial activities.
 - Clarification: While industrial activities are significant sources of pollution, other activities like agriculture, transportation, and household practices also contribute. For instance, agricultural runoff containing fertilizers and pesticides can pollute water bodies.
- Misconception: Pollution is only harmful to wildlife.
 - Clarification: Pollution affects various aspects of human life, including health, recreation, and livelihoods. For instance, contaminated water sources can lead to waterborne diseases, affecting human health and well-being.
- Misconception: Pollution problems are unsolvable and too large-scale to address.
 - Clarification: While pollution is a complex issue, there are effective strategies and solutions available. These include regulations, technological advancements, public awareness campaigns, and individual actions that collectively contribute to reducing pollution levels.
- Misconception: Recycling and waste treatment processes eliminate pollution entirely.
 - Clarification: Recycling and waste treatment help manage pollution by reducing the volume of waste and preventing harmful substances from entering the environment. However, these processes may not completely eliminate pollution, and proper disposal methods are still crucial to minimize environmental impact.

Differentiation through *Universal Design for Learning*

UDL Indicator

Representation: Highlight patterns, critical features, big ideas, and relationships

Teacher Actions:

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- Use outlines, graphic organizers, unit organizer routines, concept organizer routines, and concept mastery routines to emphasize key ideas and relationships
- Use multiple examples and non-examples to emphasize critical features
- Use cues and prompts to draw attention to critical features
- Highlight previously learned skills that can be used to solve unfamiliar problems

Supporting Multilingual/English Learners

Related *CELP standards:*

Learning Targets:

*The CELP guidance is to support the development of language; access to course content expectations should not change as a result of MLL status.

An EL can conduct research and evaluate and communicate findings to answer questions or solve problems.

I can propose solutions to air pollution to lessen the impact on the environment, society and the economy

- Level 1: With prompting and support, I can suggest simple ways to reduce air pollution and help the environment, society, and the economy.
- Level 2: With prompting and support, I can propose solutions to reduce air pollution and its impact on the environment, society, and the economy based on information I find.
- Level 3: With guidance and support, I can propose solutions to reduce air pollution and its impact on the environment, society, and the economy by gathering and evaluating information from multiple sources.

- Level 4: I can propose effective solutions to reduce air pollution and its impact on the environment, society, and the economy by conducting research, synthesizing information, and presenting it in an organized manner.
- Level 5: I can propose advanced solutions to reduce air pollution and its impact on the environment, society, and the economy by conducting thorough research, analyzing information critically, and presenting comprehensive solutions with appropriate citations.

Lesson Sequence	Learning Target	Success Criteria/Assessment/Resources
1	<p>I can identify sources of water pollution and discuss the impacts to the environment, society, and the economy</p> <p>I can generate solutions to water pollution to lessen the impacts on the environment, society, and the economy</p>	<ul style="list-style-type: none"> • I can demonstrate that point source refers to a single, identifiable source of a pollutant while nonpoint sources of pollution are diffused and can be difficult to identify • I can use data to show that increasing ocean temperatures, ocean acidification and sediment runoff from agriculture practices have caused coral reefs to decline. • I can generate examples that show large scale oil spills kill plants and animals due to chemical and physical impacts. • I can conclude that excess nutrients in the ocean from agricultural runoff and other sources causes oceanic and freshwater dead zones. • I can argue that thermal pollution from factories using natural waterways to cool equipment, alters the concentration of dissolved oxygen and tests an organism's physical tolerances. • I can articulate the results of heavy metals impacting the drinking water supply. • I can discuss how endocrine disruptors can lead to birth defects. • I can model how bioaccumulation of toxins in food sources such as large fish can cause issues with the reproductive, nervous, and circulatory systems. • I can generate a list of waterborne pathogens, their sources, and human health impacts to justify the need for potable water globally • I can illustrate how modern landfills put in place efforts to make sure toxins do not drain into watersheds, but are not always effective. • I can justify each step of the sewage treatment processes and distinguish that modern sewage plants do not allow collecting rain water and do not overflow raw sewage into waterways. • I can discuss the recycling process and propose ways to increase its efficiency and sustainability
2	<p>I can identify both the primary and secondary sources of air pollution and discuss the impacts to the environment, society, and the economy</p>	<ul style="list-style-type: none"> • I can identify the major primary and secondary pollutants and generate a list of their sources • I can distinguish between industrial and photochemical smog • I can connect photochemical and industrial smog events, including thermal inversions to both atmospheric and geological trends • I can justify the need for solutions to air pollution

	I can propose solutions to air pollution to lessen the impact on the environment, society and the economy	<p>though articulation of impacts to the environment, society, and the economy</p> <ul style="list-style-type: none"> ● I can discuss solutions already in place to reduce air pollution and engineer new ideas or ways to increase the use of existing solutions
3	<p>I can identify sources of land/soil pollution and discuss the impacts to the environment, society, and the economy</p> <p>I can generate solutions to land/soil pollution to lessen the impact on the environment, society and the economy.</p>	<ul style="list-style-type: none"> ● I can illustrate how modern landfills put in place efforts to make sure toxins do not drain into soil, but are not always effective. ● I can identify other sources of land/soil pollution such as solid waste, e-waste, runoff of different pollutants and propose solutions that are already in place be expanded or engineer new solutions

Unit Title:	
Global Change	
Relevant Standards: Bold indicates priority	
All College Board Practices are infused in these lessons.	
Essential Question(s):	Enduring Understanding(s):
<ul style="list-style-type: none"> • What are the natural and anthropogenic drivers of climate change? • How are human activities increasing greenhouse gas emissions? • How does human activity impact the ozone layer? • What are human activities that increase the loss of biodiversity globally? • How can humans reduce their global impacts? 	<ul style="list-style-type: none"> • The ozone layer is crucial for protecting life on Earth by absorbing harmful UV radiation, and human activities can significantly deplete it, leading to negative consequences for both the environment and society. • Human activities, such as the use of chlorofluorocarbons (CFCs) and hydrofluorocarbons (HFCs), contribute to ozone depletion and global climate change, highlighting the need for sustainable alternatives. • The Montreal Protocol has been successful in reducing global ozone loss, demonstrating the effectiveness of international cooperation in addressing environmental challenges. • Greenhouse gasses play a critical role in regulating Earth's temperature through the greenhouse effect, but human activities have led to an increase in their concentrations, resulting in global climate change. • Climate change has far-reaching impacts on ecosystems, biodiversity, and human societies, including rising sea levels, habitat destruction, and increased frequency of extreme weather events. • Human behavior poses significant threats to global biodiversity, including habitat destruction, invasive species, and pollution, emphasizing the importance of adopting sustainable practices. • Sustainable alternatives and practices can help mitigate the negative impacts of human activities on the environment, strengthen the economy, and promote social justice and equity. Stratospheric ozone is vital to life on Earth, human activities have caused the depletion of stratospheric ozone. Human activities can increase greenhouse gasses that can cause human health and environmental problems. • Changing ecosystems and pressure from human populations can cause some species to become endangered.
Demonstration of Learning:	Pacing for Unit
	6
Unit-specific Vocabulary:	

Biodiversity, Chlorofluorocarbons (CFCs), Endangered Species, Global climate change, Greenhouse effect, Greenhouse gasses, HIPPCO, Hydrofluorocarbons (HFCs), Invasive species, Ocean acidification, Ocean warming, Stratospheric ozone.

Anticipated misconceptions:

- Misconception: Ozone depletion and global warming are the same thing.
 - Clarification: Ozone depletion refers specifically to the thinning of the ozone layer in the stratosphere, while global warming refers to the overall increase in Earth's average temperature due to the greenhouse effect.
- Misconception: Ozone depletion is only caused by human activities.
 - Clarification: While human activities, such as the use of CFCs, contribute significantly to ozone depletion, natural processes also play a role. Human activities have accelerated ozone depletion, but natural processes like volcanic eruptions also release ozone-depleting substances.
- Misconception: Ozone depletion and the greenhouse effect are entirely separate phenomena.
 - Clarification: While they are distinct, there is some overlap. Ozone depletion affects the stratosphere and primarily impacts UV radiation levels, while the greenhouse effect occurs in the troposphere and impacts temperature regulation. However, some ozone-depleting substances also act as greenhouse gases, contributing to both phenomena.
- Misconception: All greenhouse gases are harmful.
 - Clarification: While some greenhouse gases, like carbon dioxide and methane, contribute to global warming and climate change, others, like water vapor, are essential for regulating Earth's temperature and supporting life. It's the excessive accumulation of certain greenhouse gases that poses a problem.
- Misconception: Climate change only affects the environment.
 - Clarification: Climate change has wide-ranging impacts, including on human societies and economies. It affects agriculture, water resources, health, and can lead to social and economic disruptions.
- Misconception: Invasive species are not harmful to ecosystems.
 - Clarification: Invasive species can have devastating effects on native ecosystems, outcompeting native species for resources, disrupting food chains, and altering habitats.
- Misconception: Climate change is a natural phenomenon, and human activities play a negligible role.
 - Clarification: While natural climate variability exists, scientific evidence overwhelmingly shows that human activities, such as burning fossil fuels and deforestation, have significantly accelerated climate change in recent decades.
- Misconception: Biodiversity loss only affects wildlife.
 - Clarification: Biodiversity loss affects ecosystems as a whole, including humans. It can lead to reduced ecosystem services, such as pollination and water purification, which are vital for human well-being.
- Misconception: Sustainable practices are costly and ineffective.
 - Clarification: While there may be upfront costs associated with implementing sustainable practices, they often lead to long-term benefits, including cost savings, improved resource efficiency, and reduced environmental impacts. Additionally, sustainable practices are essential for ensuring a healthy planet for future generations.

Differentiation through [Universal Design for Learning](#)

UDL Indicator	Teacher Actions:
<p>Representation: Highlight patterns, critical features, big ideas, and relationships</p>	<ul style="list-style-type: none"> ● Highlight or emphasize key elements in text, graphics, diagrams, formulas ● Use outlines, graphic organizers, unit organizer routines, concept organizer routines, and concept mastery routines to emphasize key ideas and relationships ● Use multiple examples and non-examples to emphasize critical features ● Use cues and prompts to draw attention to critical features ● Highlight previously learned skills that can be

used to solve unfamiliar problems

Supporting Multilingual/English Learners

Related *CELP standards:*

Learning Targets:

*The CELP guidance is to support the development of language; access to course content expectations should not change as a result of MLL status.

An EL can conduct research and evaluate and communicate findings to answer questions or solve problems.

I can propose sustainable alternatives to human behaviors that preserve rather than threaten biodiversity

- Level 1: I can identify sustainable alternatives to human behaviors that help protect biodiversity with support.
- Level 2: I can identify and record some sustainable alternatives to human behaviors that help protect biodiversity.
- Level 3: I can research and evaluate multiple sustainable alternatives to human behaviors that help protect biodiversity, and provide a list of sources.
- Level 4: I can conduct research to gather and synthesize information from multiple sources about sustainable alternatives to human behaviors, evaluate their reliability, and integrate them into an organized report, citing sources appropriately.
- Level 5: I can conduct in-depth research to gather and synthesize information from multiple sources about sustainable alternatives to human behaviors, using advanced search terms effectively, evaluating their reliability, analyzing and integrating them into a clearly organized text, and citing sources appropriately.

Lesson Sequence	Learning Target	Success Criteria/Assessment/Resources
1	<p>I can discuss the importance of the ozone layer and illustrate how it naturally builds and breaks down through chemical reactions</p> <p>I can predict how certain human activities will contribute to ozone depletion</p> <p>I can propose ways to enhance ozone protections</p>	<ul style="list-style-type: none"> ● I can model that natural build up and break down of ozone in the atmosphere to maintain appropriate functioning ● I can model how stratospheric ozone absorbs harmful UV rays preventing them from reaching the Earth's surface. ● I can explain how chlorofluorocarbons (CFCs) deplete stratospheric ozone. ● I can differentiate that Hydrofluorocarbons (HFCs) are more reactive than Chlorofluorocarbons (CFCs) and are not ozone-depleting chemicals, they are however still very strong greenhouse gasses. ● I can evaluate the success of the Montreal Protocol on global ozone loss through analysis of current data and propose ways to increase or maintain successes
2	<p>I can connect the link between global climate and greenhouse gas concentrations in the atmosphere through the greenhouse effect</p> <p>I can analyze and link data showing greenhouse gas emissions from both human and natural activities to climate data</p> <p>I can articulate the impacts of global climate change on both the natural and anthropogenic environments</p>	<ul style="list-style-type: none"> ● I can model how the naturally occurring greenhouse effect results in the surface temperature necessary for life on Earth to exist. ● I can identify Carbon dioxide, methane, water vapor, nitrous oxide, and chlorofluorocarbons (CFCs) as examples of greenhouse gasses and compare their climate changing potancies. ● I can use data to conclude that rising sea levels, disease vectors spreading and extreme weather events are all consequences of increasing global temperature. ● I can explain that warming of the ocean causes corals to bleach and eventually die. This causes a loss of habitat for a very complex and diverse

	I can predict the economic toll climate change will have on countries into future based on current data and future projections of climate change	ecosystem. <ul style="list-style-type: none"> ● I can use data and modeling to justify that Increased CO2 concentrations in the atmosphere cause the ocean to acidify
3	<p>I can assess the ways that human behavior threatens global biodiversity</p> <p>I can propose sustainable alternatives to human behaviors that preserve rather than threaten biodiversity</p>	<ul style="list-style-type: none"> ● I can analyze case studies of how human movement has facilitated invasive species and how these organisms can live outside of their normal habitat and often threaten native species. ● I can research and report on an invasive species that is having a negative effect on an ecosystem in the United States. ● I can evaluate what techniques have been used to eliminate invasive species. ● I can examine how HIPPCO (habitat destruction, invasive species, population growth, pollution, climate change, and over exploitation) are the major reasons for a loss in biodiversity ● I can propose sustainable alternatives to human behaviors that reduce impacts to ecosystems, strengthen the economy, and create a more just and equitable society through design/creation of a sustainable city.

Course Title:	Content Area:	Grade Level:	Credit (if applicable)
Oceanography	Science	10-12	0.5

Course Description:

This course views oceanography as a science from four different perspectives: Biological, Chemical, Physical, and Geological. Through each perspective students will build an understanding of ocean zones, coastlines, and marine life; biogeochemical cycles; physical factors including salinity, temperature; ocean floor, plate tectonics, boundaries, earthquakes, volcanoes, and trenches; waves, tides, thermohaline circulation, and weather; climate change; and human impact. This course embeds multiple hands-on and virtual lab experiences to enhance their knowledge and class experience. Students will be expected to research and share their findings through projects, models, written and/or oral reports and presentations.

Aligned Core Resources:

Digital Resources: [Lawrence Hall of Science Simulations](#)

Connection to the *BPS Vision of the Graduate*

- CRITICAL THINKING AND PROBLEM SOLVING**
- Collect, assess and analyze relevant information
 - Reason effectively.
 - Use systems thinking.
 - Make sound judgments and decisions.
 - Identify, define and solve authentic problems and essential questions.
 - Reflect critically on learning experience, processes and solutions
 - Transfer knowledge to other situations
- COMMUNICATION**
- Articulates thoughts and ideas effectively using oral, written and nonverbal communication skills in a variety of forms and contexts.
 - Listen effectively to decipher meaning, including knowledge, values, attitudes and intentions.
 - Use communication for a range of purposes (e.g. to inform, instruct, motivate and persuade)
 - Communicate effectively in diverse environments.

Additional Course Information: Knowledge/Skill Dependent courses/prerequisites

Link to *Completed Equity Audit*

[Oceanography Equity Audit](#)

Standard Matrix

Partial Connection to the Next Generation Science Standards

Next Generation Science Standards	Unit 1	Unit 2	Unit 3	Unit 4
HS-LS1-3 . Plan and conduct an investigation to provide evidence that feedback mechanisms maintain homeostasis.				x
HS-LS1-5 . Use a model to illustrate how photosynthesis transforms light energy into chemical energy.	x	x		
HS-LS1-6 . Construct and revise an explanation based on evidence for how carbon, hydrogen, and oxygen from sugar molecules may combine with other elements to form amino acids and/or other large carbon-based	x	x		

molecules.				
HS-LS1-7 . Use a model to illustrate that cellular respiration is a chemical process whereby the bonds of food molecules and oxygen molecules are broken and the bonds in new compounds are formed, resulting in a net transfer of energy.	x	x		
HS-LS2-1 . Use mathematical and/or computational representations to support explanations of factors that affect carrying capacity of ecosystems at different scales.	x	x		
HS-LS2-2 . Use mathematical representations to support and revise explanations based on evidence about how factors affecting biodiversity and populations in ecosystems of different scales.	x	x		
HS-LS2-5 . Plan and conduct an investigation of the properties of water and its effects on Earth materials and surface processes.		x		
HS-LS2-6 . Evaluate claims, evidence, and reasoning that the complex interactions in ecosystems maintain relatively consistent numbers and types of organisms in stable conditions, but changing conditions may result in a new ecosystem.	x			
HS-LS2-7 . Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.	x			
HS-LS3-2 . Make and defend a claim based on evidence that inheritable genetic variations may result from (1) new genetic combinations through meiosis, (2) viable errors occurring during replication, and/or (3) mutations caused by environmental factors.				x
MS-ESS1-1 . Develop and use a model of the Earth-sun-moon system to describe the cyclic patterns of lunar phases, eclipses of the sun and moon, and seasons.			x	
HS-ESS1-5 . Evaluate evidence of the past and current movements of continental and oceanic crust and the theory of plate tectonics to explain the ages of crustal rocks.				x
HS-ESS2-1 . Develop a model to illustrate how Earth's internal and surface processes operate at different spatial and temporal scales to form continental and ocean-floor features.		x	x	x
HS-ESS2-2 . Analyze geoscience data to make the claim that one change to Earth's surface can create feedback that causes changes to other Earth systems.		x	x	
HS-ESS2-4 . Use a model to describe how variations in the flow of energy into and out of Earth's systems result in changes in climate.		x	x	x
HS-ESS2-5 . Plan and conduct an investigation of the properties of water and its effects on Earth materials and surface processes.		x	x	
HS-ESS2-7 . Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.		x		
HS-PS3-1 . Create a computational model to calculate the change in the energy of one component in a system when the change in energy of the other component(s) and energy flows in and out of the system are known.			x	

HS-PS3-2 . Develop and use models to illustrate that energy at the macroscopic scale can be accounted for as a combination of energy associated with the motion of particles (objects) and energy associated with the relative positions of particles (objects).			x	
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Unit Links

[Biological Factors and Our Oceans](#)

[Chemical Factors and Our Oceans](#)

[Physical Factors and Our Oceans](#)

[Geology of Our Oceans](#)

Unit Title:

Biological Factors and Our Oceans

Partial NGSS Connections:

- [HS-LS2-6](#). Evaluate claims, evidence, and reasoning that the complex interactions in ecosystems maintain relatively consistent numbers and types of organisms in stable conditions, but changing conditions may result in a new ecosystem.
- [HS-LS2-7](#). Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.
- [HS-LS2-1](#). Use mathematical and/or computational representations to support explanations of factors that affect carrying capacity of ecosystems at different scales.
- [HS-LS1-6](#). Construct and revise an explanation based on evidence for how carbon, hydrogen, and oxygen from sugar molecules may combine with other elements to form amino acids and/or other large carbon-based molecules.
- [HS-LS1-7](#). Use a model to illustrate that cellular respiration is a chemical process whereby the bonds of food molecules and oxygen molecules are broken and the bonds in new compounds are formed, resulting in a net transfer of energy.
- [HS-LS1-5](#). Use a model to illustrate how photosynthesis transforms light energy into chemical energy.
- [HS-LS2-2](#). Use mathematical representations to support and revise explanations based on evidence about how factors affecting biodiversity and populations in ecosystems of different scales.

Essential Question(s):

- How can physical, chemical, biological, and geological factors shape marine ecosystems?
- What role do plants play in sustaining life in the oceans?
- What role do animals play in sustaining life in the world's oceans?
- How does the biodiversity of plants and animals shape specific marine ecosystems?

Enduring Understanding(s):

- Marine ecosystems are forged and maintained through the interaction of various factors including physical, chemical, biological and geological components.
- Marine ecosystems biodiversity is dependent on global position and physical, chemical, biological and geological factors.
- Plant life is essential to maintaining balance within a marine ecosystem. The presence of plant life supports organisms within other trophic levels and supports the chemical balance of the marine environment.
- Each marine zone has unique biogeochemical factors that influence the zonal specific biodiversity. The species and populations found in one zone may not be the same as another zone.
- Marine animals are dependent on the presence of marine plant life.
- Marine animals exist in locations that meet their needs. Biogeochemical factors influence an organism's ability to survive in an ecosystem.
- Marine ecosystems are dynamic in nature, changes to marine plant or animal populations may have a significant impact on the overall health of the ecosystem. The completeness or integrity of an ecosystem's biodiversity is often used as a measure of the ecosystem's health.

Demonstration of Learning:**Pacing for Unit**

Unit-specific Vocabulary:

Abyssal, abyssal zone, adaptation, algae, aphotic/midnight zone, Arctic ecosystem, autotrophic, bacteria, bathyal zone, bioluminescence, canopy, climate, climate change, colonial, coral bleaching, coral ecosystem, deep sea ecosystem, diatoms, dinoflagellates, diversity, diverse, drilling, dysphotic/twilight zone, epipelagic zone, euphotic/sunlit zone, extreme environment, fisheries, food chain, food web, habitats, hadal zone, invertebrates, kelp, kelp forest, latitude, longitude, mangrove, mesopelagic zone, multicellular, overfishing, pelagic zone, photophores, photosynthetic, phytoplankton, polar, pollution, polyps, protists, rocky shore, roots, sandy shore, sea floor, seagrass, seed, sonar, tide pools, tides, tropical, unicellular, vertebrates, zones.

Anticipated misconceptions:

- **Misconception:** Marine ecosystems are only shaped by physical factors like water temperature and currents.
 - **Clarification:** Marine ecosystems are influenced by a combination of physical, chemical, biological, and geological factors. Each of these factors plays a crucial role in shaping the environment and the organisms living within it.
- **Misconception:** The chemical composition of the ocean is the same everywhere.
 - **Clarification:** Chemical factors such as salinity, nutrient levels, and dissolved oxygen can vary significantly across different regions of the ocean. These variations impact marine life and the health of ecosystems, making each environment unique.
- **Misconception:** Only large animals like fish and whales are important in shaping marine ecosystems.
 - **Clarification:** All biological factors, including microorganisms, plants, and small invertebrates, play essential roles in marine ecosystems. They contribute to nutrient cycling, habitat formation, and energy flow through food webs.
- **Misconception:** Geological factors only refer to the physical structure of the ocean floor.
 - **Clarification:** Geological factors also include dynamic processes like volcanic activity, sedimentation, and plate tectonics, which influence the formation and evolution of marine ecosystems over time.
- **Misconception:** Human impact on marine animal biodiversity is minimal.
 - **Clarification:** Human activities such as overfishing, pollution, and climate change significantly impact marine animal biodiversity. These actions can lead to habitat loss, species decline, and disruptions in ecological balance.

Differentiation through [Universal Design for Learning](#)**UDL Indicator**

Comprehension: Highlight patterns, critical features, big ideas, and relationships

Teacher Actions:

- Highlight or emphasize key elements in text, graphics, diagrams, formulas
- Use outlines, graphic organizers, unit organizer routines, concept organizer routines, and concept mastery routines to emphasize key ideas and relationships
- Use multiple examples and non-examples to emphasize critical features
- Use cues and prompts to draw attention to critical features
- Highlight previously learned skills that can be used to solve unfamiliar problems

Supporting Multilingual/English Learners**Related [CELP standards:](#)****Learning Targets:**

I can argue the importance of plants and animals to specific marine ecosystems.

An EL can . . . speak and write about grade-appropriate complex literary and informational texts and topics.

- Level 1: With prompting and support, I can use vocabulary to verbally explain the importance of plants and animals on marine ecosystems.
- Level 2: With prompting and support, I can illustrate and use vocabulary to explain the importance of plants and animals on marine ecosystems.
- Level 3: With guidance, I can model and explain the importance of plants and animals on marine ecosystems.
- Level 4 /5: I can model and use evidence to explain the importance of plants and animals on marine ecosystems.

Lesson Sequence	Learning Target	Success Criteria/Assessment/Resources
<p>1</p> <p>How can physical, chemical, biological, and geological factors shape marine ecosystems?</p>	<ul style="list-style-type: none"> ● I can question and explore the factors that shape a marine ecosystem. 	<ul style="list-style-type: none"> ● I can identify and describe how physical factors shape a specific marine ecosystem . ● I can identify and describe how chemical factors shape specific marine ecosystems. ● I can identify and describe how biological factors shape specific marine ecosystems. ● I can identify and describe how geological factors shape marine ecosystems.
<p>2</p> <p>What role do plants play in sustaining life in the oceans?</p>	<ul style="list-style-type: none"> ● I can model and explain the role plants play in the world’s oceans . 	<ul style="list-style-type: none"> ● I can identify major groups of plants found in the world's oceans by zones. ● I can identify the biogeochemical factors that impact plant biodiversity. ● I can plan an investigation to determine the importance of plants to marine systems. ● I can connect the role of plants to specific marine ecosystems.
<p>3</p> <p>What role do animals play in sustaining life in the world's oceans?</p>	<ul style="list-style-type: none"> ● I can model and explain the role animals play in the world's oceans 	<ul style="list-style-type: none"> ● I can identify major groups of animals found in the world's oceans by zones ● I can appraise the impact humans are having on animal biodiversity within the world's oceans. ● I can connect the role of animals to specific marine ecosystems.
<p>4</p> <p>How does the biodiversity of plants and animals shape specific marine ecosystems?</p>	<ul style="list-style-type: none"> ● I can argue the importance of plants and animals to specific marine ecosystems through the critique of conservation plans. 	<ul style="list-style-type: none"> ● I can review and critique the validity of a conservation plan and propose improvements.. ● I can defend a conservation plan to protect the biodiversity of plants and animals to protect marine ecosystems.

Unit Title:

Chemical Factors and Our Oceans

Relevant Standards: Bold indicates priority

Partial NGSS Connections:

- [HS-LS1-5](#). Use a model to illustrate how photosynthesis transforms light energy into chemical energy.
- [HS-LS1-6](#). Construct and revise an explanation based on evidence for how carbon, hydrogen, and oxygen from sugar molecules may combine with other elements to form amino acids and/or other large carbon-based molecules.
- [HS-LS1-7](#). Use a model to illustrate that cellular respiration is a chemical process whereby the bonds of food molecules and oxygen molecules are broken and the bonds in new compounds are formed, resulting in a net transfer of energy
- [HS-ESS2-1](#). Develop a model to illustrate how Earth's internal and surface processes operate at different spatial and temporal scales to form continental and ocean-floor features.
- [HS-ESS2-2](#). Analyze geoscience data to make the claim that one change to Earth's surface can create feedback that causes changes to other Earth systems.
- [HS-ESS2-4](#). Use a model to describe how variations in the flow of energy into and out of Earth's systems result in changes in climate.
- [HS-ESS2-5](#). Plan and conduct an investigation of the properties of water and its effects on Earth materials and surface processes.
- [HS-LS2-5](#). Plan and conduct an investigation of the properties of water and its effects on Earth materials and surface processes.
- [HS-ESS2-7.7](#) Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.

Essential Question(s):

- What role does oxygen play within marine systems?
- What role does temperature and salinity play within marine systems?
- What role do biogeochemical cycles play within marine systems?

Enduring Understanding(s):

- Oxygen distribution in the ocean depends on both biological processes, like the respiration of organisms, and on physical processes such as current flow. Changes in either of these processes should therefore lead to changes in the oxygen distribution. Dissolved oxygen can be viewed as a kind of sensitive early warning system for global (climate) change in the ocean. Scientific studies show that this early warning system can detect the expected decrease in oxygen transport from the atmosphere into the ocean that is driven by global current and mixing processes, as well as possible changes in the marine biotic communities.
- The ocean water is constantly churning underneath, bringing nutrients up to the top. The difference in density of cold water versus density of warmer water is responsible for ocean currents and upwelling. Warm seawater floats and cold, dense, seawater sinks, so ocean temperatures also vary across the surface and into the depths. Changes in the temperature and salinity can have a significant impact on marine ecosystems.
- The term biogeochemical is derived from "bio" meaning biosphere, "geo" meaning the geological

	<p>components and “chemical” meaning the elements that move through a cycle. The matter on Earth is conserved and present in the form of atoms. Since matter can neither be created nor destroyed, it is recycled in the earth’s system (including marine systems) in various forms.</p> <ul style="list-style-type: none"> • The major elements include: Carbon, Hydrogen, Nitrogen, Oxygen, Phosphorus, Sulphur. These elements are recycled through the biotic and abiotic components of the marine ecosystem. The atmosphere, hydrosphere and lithosphere are the abiotic components of the ecosystem.
Demonstration of Learning:	Pacing for Unit
	9 Blocks
Unit-specific Vocabulary:	
Acidification, biogeochemical, brackish water, carbon cycle, climate change, concentration, cultural eutrophication, dead sea, density, deoxygenation, dissolved oxygen, downwelling, estuary, eutrophication, ground water, halocline, homeostasis, infiltration, nitrogen cycle, ocean acidification, ocean warming, phosphorus cycle, pressure, salinity, sewage pollution, thermohaline circulation, upwelling.	
Anticipated misconceptions:	
<ul style="list-style-type: none"> • Misconception: Salinity and temperature do not affect ocean circulation. <ul style="list-style-type: none"> ○ Clarification: Salinity and temperature differences drive thermohaline circulation, which is a major component of global ocean circulation. This circulation helps regulate climate by distributing heat and nutrients around the globe. • Misconception: Ocean currents are only important for marine life. <ul style="list-style-type: none"> ○ Clarification: Ocean currents are crucial for global homeostasis. They help regulate climate, distribute nutrients and gasses, and support the life cycles of many marine organisms by transporting larvae and other life stages. • Misconception: Human activities have a negligible impact on biogeochemical cycles. <ul style="list-style-type: none"> ○ Clarification: Human activities, such as pollution, deforestation, and fossil fuel combustion, significantly alter biogeochemical cycles. These changes can lead to negative impacts on marine ecosystems, such as ocean acidification, eutrophication, and disruptions in nutrient cycling. • Misconception: Only carbon moves through marine systems in biogeochemical cycles. <ul style="list-style-type: none"> ○ Clarification: In addition to carbon, other essential elements like nitrogen and phosphorus also move through marine systems in biogeochemical cycles. These cycles are interconnected and support the health and productivity of marine ecosystems. • Misconception: Salinity in the ocean is constant and not influenced by external factors. <ul style="list-style-type: none"> ○ Clarification: Salinity can vary due to factors such as freshwater input from rivers, evaporation rates, ice formation and melting, and human activities like desalination and pollution. These variations can impact marine life and ocean circulation. 	
Differentiation through Universal Design for Learning	
UDL Indicator	Teacher Actions:
Engagement: Optimize relevance, value, and authenticity	<ul style="list-style-type: none"> • Design activities so that learning outcomes are authentic, communicate to real audiences, and reflect a purpose that is clear to the participants

- Provide tasks that allow for active participation, exploration and experimentation

Supporting Multilingual/English Learners

Related *CELP standards:*

Learning Targets:

I can support with evidence how biogeochemical cycles sustain the health of the world's oceans .
 An EL can . . . speak and write about grade-appropriate complex literary and informational texts and topics.

- Level 1: With prompting and support, I can use vocabulary to verbally explain how biogeochemical cycles keep the oceans healthy.
- Level 2: With prompting and support, I can illustrate and use vocabulary to explain how biogeochemical cycles keep the oceans healthy.
- Level 3: With guidance, I can model and explain how biogeochemical cycles keep the oceans healthy.
- Level 4 /5: I can model and use evidence to explain how biogeochemical cycles keep the oceans healthy.

Lesson Sequence	Learning Target	Success Criteria/Assessment/Resources
<p>1 What role does oxygen play within marine systems?</p>	<ul style="list-style-type: none"> ● I can compare and contrast oxygen levels within different marine systems and determine how it impacts these systems. 	<ul style="list-style-type: none"> ● I can explain how photosynthetic processes within a variety of organisms provide dissolved oxygen to marine systems. ● I can design an investigation exploring factors that influence oxygen levels within marine systems. ● I can analyze data to explain how varying levels of oxygen affect the health of an ecosystem.
<p>2 What role does temperature and salinity play within marine systems?</p>	<ul style="list-style-type: none"> ● I can evaluate the importance of salinity and temperature within marine systems. 	<ul style="list-style-type: none"> ● I can analyze data to determine factors that increase or decrease salinity within ocean systems. ● I can analyze data to determine factors that influence temperature within marine systems. ● I can describe how salinity and temperature impact thermohaline circulation . ● I can evaluate the importance of ocean currents to global homeostasis.
<p>3 What role do biogeochemical cycles play within marine systems?</p>	<ul style="list-style-type: none"> ● I can support with evidence how biogeochemical cycles sustain the health of the world's oceans . 	<ul style="list-style-type: none"> ● I can model how carbon moves through marine systems and explain how it supports homeostasis. ● I can model and describe how phosphorus moves through marine systems and how it supports homeostasis. ● I can model and describe how nitrogen moves through marine systems and how it supports homeostasis. ● I can make a claim supported with evidence regarding how human activity impacts (+/-) biogeochemical cycles.

Unit Title:	
Physical Factors and Our Oceans	
Relevant Standards: Bold indicates priority	
<ul style="list-style-type: none"> ● HS-ESS2-5. Plan and conduct an investigation of the properties of water and its effects on Earth materials and surface processes. ● HS-ESS3-6. Use a computational representation to illustrate the relationships among Earth systems and how those relationships are being modified due to human activity. ● MS-ESS1-1. Develop and use a model of the Earth-sun-moon system to describe the cyclic patterns of lunar phases, eclipses of the sun and moon, and seasons. ● HS-ESS2-4. Use a model to describe how variations in the flow of energy into and out of Earth's systems result in changes in climate. ● HS-ESS2-1. Develop a model to illustrate how Earth's internal and surface processes operate at different spatial and temporal scales to form continental and ocean-floor features. ● HS-ESS2-2. Analyze geoscience data to make the claim that one change to Earth's surface can create feedbacks that cause changes to other Earth systems. ● HS-PS3-1. Create a computational model to calculate the change in the energy of one component in a system when the change in energy of the other component(s) and energy flows in and out of the system are known. ● HS-PS3-2. Develop and use models to illustrate that energy at the macroscopic scale can be accounted for as a combination of energy associated with the motion of particles (objects) and energy associated with the relative positions of particles (objects). 	
Essential Question(s):	Enduring Understanding(s):
<ul style="list-style-type: none"> ● How do different types of ocean waves impact marine and terrestrial systems? ● What are the causes and effects of tides? ● How does temperature impact ocean dynamics? 	<ul style="list-style-type: none"> ● Waves also work in combination with tides and currents to carry nutrients to marine animals including those that live along the shorelines. By pushing water onto the shore, waves make it possible for intertidal animals to live in areas of beaches and shorelines that would otherwise be too dry to sustain them. ● High and low tides are caused by the Moon. The Moon's gravitational pull generates something called the tidal force. The tidal force causes Earth—and its water—to bulge out on the side closest to the Moon and the side farthest from the Moon. These bulges of water are high tides. ● The ocean is the largest solar energy collector on Earth. Not only does water cover more than 70 percent of our planet's surface, it can also absorb large amounts of heat without a large increase in temperature. This tremendous ability to store and release heat over long periods of time gives the ocean a central role in stabilizing Earth's climate system.
Demonstration of Learning:	Pacing for Unit
	7 Blocks
Unit-specific Vocabulary:	

Weather, climate, currents, erosion, gravitational pull, high tide, intertidal zone, low tide, lunar, neap tide, rip, solar, submarine earthquakes, submarine volcanoes, temperature, thermodynamic, thermoclines, thermohaline circulation, tidal force, tidal waves, tide pool, wind waves, tsunamis.

Anticipated misconceptions:

- Misconception: All ocean waves have the same impact on marine and terrestrial systems.
 - Clarification: Different types of ocean waves vary in their energy, frequency, and amplitude, leading to diverse impacts on marine and terrestrial systems. Understanding these differences is crucial for comprehending their effects on coastal erosion, sediment transport, and ecosystem dynamics.
- Misconception: Tides and waves are the same phenomenon.
 - Clarification: Tides result from the gravitational pull of celestial bodies like the moon and sun, causing cyclic changes in sea level, while waves are disturbances propagated through the ocean surface primarily by wind, seismic activity, or gravitational forces. Recognizing this distinction helps in understanding their respective impacts on coastal areas and ecosystems.
- Misconception: Tides and waves have no influence on terrestrial systems.
 - Clarification: Tides and waves indirectly affect terrestrial systems through processes such as erosion, sediment deposition, and flooding. Their impacts extend beyond the coastlines, shaping landforms, influencing habitat availability, and affecting human activities and infrastructure in coastal regions.
- Misconception: Increasing oceanic temperature only affects marine systems.
 - Clarification: Rising oceanic temperatures have widespread impacts on both marine and terrestrial systems. These include coral bleaching, shifts in marine biodiversity, rising sea levels leading to coastal inundation, and alterations in weather patterns and climatic conditions, affecting terrestrial ecosystems and human populations.
- Misconception: Oceanic zones and temperature ranges only impact marine ecosystems.
 - Clarification: Understanding oceanic zones and their temperature ranges is essential for comprehending their broader impacts on weather patterns, climate regulation, and terrestrial ecosystems. Ocean temperature influences atmospheric circulation, precipitation patterns, and climatic conditions, shaping terrestrial ecosystems and human livelihoods worldwide.

Differentiation through *Universal Design for Learning*

UDL Indicator	Teacher Actions:
<p>Language and Symbols: Clarify vocabulary and symbols</p>	<ul style="list-style-type: none"> ● Pre-teach vocabulary and symbols, especially in ways that promote connection to the learners' experience and prior knowledge ● Provide graphic symbols with alternative text descriptions ● Highlight how complex terms, expressions, or equations are composed of simpler words or symbols ● Embed support for vocabulary and symbols within the text (e.g., hyperlinks or footnotes to definitions, explanations, illustrations, previous coverage, translations) ● Embed support for unfamiliar references within the text (e.g., domain specific notation, lesser known properties and theorems, idioms, academic language, figurative language, mathematical language, jargon, archaic language, colloquialism, and dialect)

Supporting Multilingual/English Learners

Related <i>CELP standards:</i>	Learning Targets:
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I can develop a model to explain the influence of physical factors on specific marine ecosystems.
 An EL can . . . speak and write about grade-appropriate complex literary and informational texts and topics.

- Level 1: With prompting and support, I can use vocabulary to verbally explain how temperature and salinity impact marine ecosystems.
- Level 2: With prompting and support, I can illustrate and use vocabulary to explain how temperature and salinity impact marine ecosystems.
- Level 3: With guidance, I can model and explain how temperature and salinity impact marine ecosystems.
- Level 4 /5: I can model and use evidence to explain how temperature and salinity impact marine ecosystems.

Lesson Sequence	Learning Target	Success Criteria/Assessment/Resources
<p>1</p> <p>How do different types of ocean waves impact marine and terrestrial systems?</p>	<ul style="list-style-type: none"> ● I can model and explain how different types of ocean waves impact marine and terrestrial systems. 	<ul style="list-style-type: none"> ● I can identify factors that influence wave activity within oceans. ● I can model and explain how different types of waves are formed. ● I can use a computer simulation to compare and contrast the impact different waves have on terrestrial and marine features. <p>Resources: Lawrence Hall of Science Simulations</p>
<p>2</p> <p>What are the causes and effects of tides?</p>	<ul style="list-style-type: none"> ● I can explain why tides are cyclic and predict tidal conditions for a given area. 	<ul style="list-style-type: none"> ● I can identify and explain the differences between tides and waves. ● I can model and explain how specific factors influence tides. ● I can research and describe the effects of tides on coastal systems.
<p>3</p> <p>How does temperature impact ocean dynamics?</p>	<ul style="list-style-type: none"> ● I can use data as evidence to argue the impact of increasing oceanic temperature on both marine and terrestrial systems. <p>Unit Assessment: I can develop a model to illustrate the influence of physical factors on specific marine ecosystems.</p>	<ul style="list-style-type: none"> ● I can identify oceanic zones according to their temperature range. ● I can model and explain the characteristics of each ocean zone. ● I can use patterns derived from data to connect ocean temperature to weather conditions. ● I can construct an explanation to define the role of the oceans in climatic conditions. ● I can interpret data related to warming oceans and predict the impact to both marine and terrestrial systems.

Unit Title:

Geology of Our Oceans

Relevant Standards: Bold indicates priority

- [HS-ESS2-1](#). Develop a model to illustrate how Earth's internal and surface processes operate at different spatial and temporal scales to form continental and ocean-floor features.
- [HS-ESS1-5](#). Evaluate evidence of the past and current movements of continental and oceanic crust and the theory of plate tectonics to explain the ages of crustal rocks.
- [HS-ESS2-4](#). Use a model to describe how variations in the flow of energy into and out of Earth's systems result in changes in climate
- [HS-ESS2-1](#). Develop a model to illustrate how Earth's internal and surface processes operate at different spatial and temporal scales to form continental and ocean-floor features.
- [HS-ESS2-2](#). Analyze geoscience data to make the claim that one change to Earth's surface can create feedback that causes changes to other Earth systems.
- [HS-LS1-3](#). Plan and conduct an investigation to provide evidence that feedback mechanisms maintain homeostasis.
- [HS-LS3-2](#). Make and defend a claim based on evidence that inheritable genetic variations may result from (1) new genetic combinations through meiosis, (2) viable errors occurring during replication, and/or (3) mutations caused by environmental factors.
- MS-LS4-6. Use mathematical representations to support explanations of how natural selection may lead to increases
- [HS-ESS2-1](#). Develop a model to illustrate how Earth's internal and surface processes operate at different spatial and temporal scales to form continental and ocean-floor features.
- [HS-ESS2-2](#). Analyze geoscience data to make the claim that one change to Earth's surface can create feedback that causes changes to other Earth systems.
- [HS-LS1-5](#). Use a model to illustrate how photosynthesis transforms light energy into chemical energy.
- [HS-LS2-2](#). Use mathematical representations to support and revise explanations based on evidence about how factors affecting biodiversity and populations in ecosystems of different scales.

Essential Question(s):

- How do tectonic forces influence oceans?
- How do geologic processes influence biodiversity of marine organisms?
- How does sedimentation impact marine systems?
- How do biological, chemical, physical, and geologic factors influence specific marine ecosystems?

Enduring Understanding(s):

- When tectonic plates slide, sink and shift the Earth's continents to form large landmasses, or supercontinents, ocean basins open and close in tandem. As these basins change shape, they can strike forms that amplify and intensify their tides.
- A significant component of the trajectory of marine biodiversity over the past 443 million years is attributed to the assembly and disassembly of the supercontinent Pangaea through plate tectonics.
- A multitude of processes occur in the ocean from the movement of huge underwater plates to the conditions that affect the everyday life of the amazing creatures that can exist in some of the ocean's most extreme environments.
- The environmental impacts of sedimentation include the following: loss of important or sensitive aquatic habitat, decrease in fishery resources, loss of recreation attributes, loss of coral reef communities, human health concerns, changes in fish migration, increases in erosion, loss of wetlands, nutrient

	<p>balance changes, circulation changes, increases in turbidity, loss of submerged vegetation, and coastline alteration.</p> <ul style="list-style-type: none"> ● Sediments are absolutely necessary for aquatic plant and animal life. Managed properly, sediments are a resource; improper sediment management results in the destruction of aquatic habitat that would have otherwise depended on their presence. ● Marine ecosystems are forged and maintained through the interaction of various factors including physical, chemical, biological and geological components. ● Marine ecosystems biodiversity is dependent on depending on global position and physical, chemical, biological and geological factors.
Demonstration of Learning:	Pacing for Unit
	10 Blocks
Unit-specific Vocabulary:	
<p>Adaptation, Adaptations, Abyssal, Abyssal plain, Abyssal zone, Alluvial deposits, Aphotic/midnight zone, Arctic ecosystem, Barrier islands, Bathyal zone, Bioluminescence, Canopy, Climate, Cold seep, Cold seep organisms, Colonial, Convergent boundaries, Coral ecosystem, Deepsea Challenger, Diverse, Diversity, Divergent boundaries, Dysphotic/twilight zone, Ecosystems, Epipelagic zone, Euphotic/sunlit zone, Extreme environment, Fisheries, Food chain, Food web, Hadal zone, Hydrothermal vent organisms, Hydrothermal vents, Invertebrates, Latitude, Longitude, Marine geology, Mariana’s Trench, Mesopelagic zone, Mid-Atlantic Ridge, Nutrient deposits, Ocean basins, Ocean hotspots, Oceanic trenches, Pelagic zone, Plate tectonics, Polar, Polyps, Ring of Fire, Sea floor, Submarine earthquake, Submarine volcanoes, The Lost City, Tides, Tide pools, Transform boundaries, Tropical.</p>	
Anticipated misconceptions:	
<ul style="list-style-type: none"> ● Misconception: Plate tectonics only affect the geography of landmasses and have minimal impact on marine ecosystems. <ul style="list-style-type: none"> ○ Clarification: Plate tectonics influence the formation of oceanic features such as trenches, ridges, and volcanic islands, which in turn affect ocean circulation patterns, habitat availability, and biodiversity. Understanding these connections is crucial for comprehending the broader impacts of plate tectonics on marine and terrestrial systems. ● Misconception: Geologic processes do not play a significant role in biodiversity. <ul style="list-style-type: none"> ○ Clarification: Geologic processes, such as volcanic activity, tectonic movements, and sedimentation, directly and indirectly influence biodiversity by creating and altering habitats, shaping coastlines, and providing nutrient sources. Recognizing these connections helps in understanding the dynamic interplay between geology and biodiversity in marine and terrestrial ecosystems. ● Misconception: Sedimentation only has negative effects on marine systems. <ul style="list-style-type: none"> ○ Clarification: While sedimentation can negatively impact marine ecosystems by smothering habitats and reducing water clarity, it also plays essential roles in ecosystem dynamics. Sediment deposition can create new habitats, replenish nutrient levels, and support diverse communities of organisms, highlighting the complex and multifaceted nature of its effects. ● Misconception: Marine ecosystems are solely shaped by biological factors, with geologic processes playing a minor role. <ul style="list-style-type: none"> ○ Clarification: Geologic factors interact with biological, chemical, and physical processes to shape marine ecosystems. These interactions influence habitat formation, nutrient cycling, and species distribution, highlighting the importance of considering geology alongside other factors in ecosystem analysis and management. 	

- Misconception: Marine ecosystems are independent entities with minimal interdependence.
 - Clarification: Marine ecosystems are interconnected and interdependent systems influenced by biological, chemical, physical, and geologic factors. Changes in one ecosystem can have cascading effects on others, highlighting the need for holistic approaches to ecosystem management and conservation that consider the complex web of interactions between marine environments.

Differentiation through [Universal Design for Learning](#)

UDL Indicator	Teacher Actions:
<p>Sustaining Effort & Persistence: Increase mastery-oriented feedback</p>	<ul style="list-style-type: none"> ● Provide feedback that encourages perseverance, focuses on development of efficacy and self-awareness, and encourages the use of specific supports and strategies in the face of challenge ● Provide feedback that emphasizes effort, improvement, and achieving a standard rather than on relative performance ● Provide feedback that is frequent, timely, and specific ● Provide feedback that is substantive and informative rather than comparative or competitive ● Provide feedback that models how to incorporate evaluation, including identifying patterns of errors and wrong answers, into positive strategies for future success

Supporting Multilingual/English Learners

Related CELP standards:	Learning Targets:
<p>I can combine biological, chemical, physical, and geological factors to comprehensively model or explain how a specific marine environment maintains homeostasis and stability.</p> <p>An EL can . . . speak and write about grade-appropriate complex literary and informational texts and topics.</p> <ul style="list-style-type: none"> ● Level 1: With prompting and support, I can use vocabulary to verbally explain how a specific marine environment maintains stability. ● Level 2: With prompting and support, I can illustrate and use vocabulary to explain how biological, chemical, physical, and geological factors help a marine ecosystem maintain homeostasis and stability ● Level 3: With guidance, I can model and explain how biological, chemical, physical, and geological factors help a marine ecosystem maintain homeostasis and stability. ● Level 4 /5: I can model and use evidence to explain how biological, chemical, physical, and geological factors help a marine ecosystem maintain homeostasis and stability. 	

Lesson Sequence	Learning Target	Success Criteria/Assessment/Resources
<p>1 How do tectonic forces influence oceans?</p>	<ul style="list-style-type: none"> ● I can evaluate the impacts of oceanic plate tectonics to marine and terrestrial systems. 	<ul style="list-style-type: none"> ● I can relate the movement of convergent plates to oceanic features and events. ● I can relate the movement of divergent plates to oceanic features and events. ● I can relate the movement of transform boundaries to oceanic features and events.
<p>2 How do geologic processes</p>	<ul style="list-style-type: none"> ● I can explain how geologic processes influence biodiversity. 	<ul style="list-style-type: none"> ● I can use patterns to deduce how structural and physiological adaptations within organisms support biodiversity in harsh environments..

<p>influence biodiversity of marine organisms?</p>		<ul style="list-style-type: none"> ● I can plan and conduct a research activity that connects geologic factors to biodiversity.
<p>3 How does sedimentation impact marine systems?</p>	<ul style="list-style-type: none"> ● I can construct an explanation anchored in evidence to how sedimentation occurs and how it affects marine systems both positively and negatively. 	<ul style="list-style-type: none"> ● I can analyze and use patterns in data to connect the influences of geologic factors to specific marine ecosystems. ● I can communicate scientific information related to my explanation, clearly and constructively to peers.
<p>4 How do biological, chemical, physical, and geologic factors influence specific marine ecosystems?</p>	<ul style="list-style-type: none"> ● I can combine biological, chemical, physical, and geological factors to comprehensively model or explain how a specific marine environment maintains homeostasis and stability. 	<ul style="list-style-type: none"> ● I can model and explain how geologic processes change marine systems physically, chemically, and biologically over time. ● I can effectively communicate my findings to my peers through a platform of my choice (model, electronic presentation, etc.). ● I can validate the claim that all marine ecosystems are interdependent on each other through biological, chemical, physical, and geologic factors.

Course Title:	Content Area:	Grade Level:	Credit (if applicable)
Website Design & Development	Business	9-12	0.5

Course Description:

In today's rapidly changing digital world, it's crucial to have a strong grasp of web design and development. This course dives into the fundamentals of crafting engaging and functional websites. Students gain essential skills to navigate the online world effectively. Students will explore the complexities of the internet, learn the basics of web design principles, explore interface and user experience design, and gain an understanding of HTML and CSS web languages. Through a mix of theory and hands-on projects, students will develop a solid understanding of web development concepts and techniques.

Aligned Core Resources:

GFC Global
 Google Sites
 Canva
 Code HS
 Code.org
 Visual Studio Code
 IBM Skills Build
 Supplemental Text Resources based on current technology

Connection to the [BPS Vision of the Graduate](#)

Website Design and Development will connect to the BPS Vision of the Graduate by ensuring students can **EFFECTIVELY COMMUNICATE IN A GLOBAL SOCIETY** specifically with communications and technology literacy and information literacy. Students will be able to understand principles of website design and basic web development computer languages. Students will also **DEMONSTRATE ACADEMIC KNOWLEDGE AND SKILLS** through their ability to master the content knowledge through project-based learning.

Additional Course Information: Knowledge/Skill Dependent courses/prerequisites

Link to [Completed Equity Audit](#)

No Prerequisites

Standard Matrix

Standard	Unit 1	Unit 2	Unit 3	Unit 4
ISTE 1.4 Students use a variety of technologies within a design process to identify and solve problems by creating new, useful or imaginative solutions.		X		X
MBA Research (Marketing Custer) Understands the concepts and strategies needed to communicate information about products, services, images, and/or ideas to achieve a desired outcome	X	X		
ITPC01.13 Consider intellectual property issues when creating Web pages.	X	X	X	X
ITC03.01 Use product/service design processes and guidelines to produce a quality IT product/service.		X		
ITC 03.03 Employ organization and design principles to sort and group information used in the IT industry.		X		

ITC08.01 Apply standards, practices and behaviors that meet legal and ethical responsibilities and exhibit positive cyber-citizenry to understand legal issues faced by IT professionals.			X	X
ITC 09.01 Identify and explain the implications IT has on business transformation and development to demonstrate an understanding of the impact on business.			X	X
ITC10.04 Summarize basic data communications components and trends to maintain and update IT systems.	X			
ITC10.05 Demonstrate technical knowledge of the internet to develop and maintain IT systems.	X			
ITC 10.06 Access and use internet services when completing IT related tasks to service and update IT systems.	X			
ITC 10.08 Demonstrate knowledge of web page basics to build an understanding of Web page design and functioning.	X	X	X	X
ITC 10.11 Recognize and analyze potential IT security threats to develop and maintain security requirements.	X			
ITPC 01.01 Iterate through design and development process to create a uniform web/digital product.		X		X
ITPC 01.02 Participate in a user focused design and development process to produce Web and digital communications solutions.		X	X	X
ITPC 01.03 Design and employ the use of motion graphics to create visual Web/digital designs.		X		X
ITPC 01.04 Gather and analyze digital communications customer requirements to best meet consumer needs.		X		X
ITPC 01.05 Define the scope of digital communication work in a written form to summarize and meet customer requirements.				X
ITPC 01.06 Prepare digital communication product specification to communicate specifications with various audiences.		X	X	X
ITPC 01.07 Demonstrate the effective use of tools for digital communications productions, development and project management to complete web/digital communication projects.		X	X	X
ITPC 01.08 Employ knowledge of Web design, programming and administration to develop and maintain Web applications.	X	X	X	X

Unit Links

[Basics of Web Design](#)

[Web Design Elements](#)

[HTML](#)

[CSS](#)

Unit Title:	
Basics of Web Design	
Relevant Standards: Bold indicates priority	
<ul style="list-style-type: none"> ● MBA Research (Marketing Custer) Understands the concepts and strategies needed to communicate information about products, services, images, and/or ideas to achieve a desired outcome. ● ITPC 01.13; ITC 10.04; ITC 10.05; ITC 10.06; ITC 10.08; ITC 10.08; ITC 10.11; ITPC 01.08 	
Essential Question(s):	Enduring Understanding(s):
<ul style="list-style-type: none"> ● How does the internet work and why is it important to understand its functioning? ● What strategies can be employed for effective internet use and how do they impact individuals and society? ● How has the internet evolved over time, and what can we predict about its future? 	<p>Understanding of Internet Fundamentals:</p> <ul style="list-style-type: none"> ● The internet is a global network of interconnected devices and servers that relies on protocols, data packets, and data centers to transmit information. ● Differentiate between the World Wide Web (WWW) and the internet itself, understanding the fundamental components and functions of each. <p>Critical Analysis and Application of Internet Knowledge:</p> <ul style="list-style-type: none"> ● Understanding important terms related to the internet enables effective communication and comprehension of online concepts. ● Comparing the internet to other computer tools enhances understanding of its unique features and capabilities. ● Analyzing how the internet functions and its societal impact fosters informed decision-making and effective use strategies. <p>Historical Context and Evolution of the Internet:</p> <ul style="list-style-type: none"> ● Describe the predecessors to the internet, recognizing their contributions and limitations in shaping its development. ● Analyze how and why the internet was created, understanding the historical, technological, and socio-political factors involved. ● Recognize the progression of the internet through distinct eras, identifying key technological advancements and societal changes. <p>Visual Representation and Communication:</p> <ul style="list-style-type: none"> ● Creating a timeline to show the history of the internet develops skills in organizing information

	<p>chronologically and communicating complex concepts visually.</p> <ul style="list-style-type: none"> ● Creating a clear visual representation of internet history enhances understanding and retention of key events and milestones. <p>Cybersecurity and Privacy Awareness:</p> <ul style="list-style-type: none"> ● Describing common internet security threats and methods for securing personal information online promotes awareness of online risks and best practices. ● Explaining the importance of privacy settings and their impact on society fosters responsible digital citizenship and ethical behavior. <p>Predictive Analysis and Future Trends:</p> <ul style="list-style-type: none"> ● Theorizing how the internet can change in the future develops critical thinking skills and prepares individuals to adapt to emerging technologies and trends. ● Understanding the role of data centers and internet protocols in supporting website functionality prepares individuals to adapt to evolving online environments.
Demonstration of Learning:	Pacing for Unit
Internet timeline, development of safety setting	6 blocks
Integration of Technology:	
Chromebooks, desktop computers with windows	
Unit-specific Vocabulary:	
<p>ARPANET, browser, client-server model, data center, data packet, DNS (Domain Name System), encryption, HTTP (Hypertext Transfer Protocol), HTTPS (Hypertext Transfer Protocol Secure), HTML (Hypertext Markup Language), intranet, internet, ISP (Internet Service Provider), malware, phishing, protocol, router, server, TCP/IP (Transmission Control Protocol/Internet Protocol), timeline, URL (Uniform Resource Locator), VPN (Virtual Private Network), web browser, web server, website, World Wide Web (WWW).</p>	
Anticipated misconceptions:	
<ul style="list-style-type: none"> ● Misconception: The terms "internet" and "World Wide Web (WWW)" are interchangeable. <ul style="list-style-type: none"> ○ Clarification: While often used interchangeably, the internet refers to the global network of interconnected devices, while the World Wide Web (WWW) specifically refers to the system of linked documents, images, and other resources accessible via the internet through web browsers. ● Misconception: All websites are part of the World Wide Web. <ul style="list-style-type: none"> ○ Clarification: While many websites are part of the World Wide Web, there are other types of internet services that don't rely on web browsers, such as email servers, FTP (File Transfer Protocol) servers, and online gaming servers. ● Misconception: The internet and the web are recent inventions. 	

- Clarification: The concept of networking and the development of early forms of the internet, such as ARPANET, began in the late 1960s. The World Wide Web was created in 1989 by Tim Berners-Lee, but the idea of a global network of computers predates this by decades.
- Misconception: The terms "web server" and "internet server" are the same.
 - Clarification: While related, a web server specifically hosts websites and serves web pages to users upon request through HTTP or HTTPS protocols. An internet server is a broader term that includes various types of servers used for different internet services, such as email servers, DNS servers, and FTP servers.
- Misconception: Data centers only store data.
 - Clarification: Data centers not only store data but also host web servers, manage network infrastructure, and provide various cloud services. They play a crucial role in ensuring the reliability, security, and performance of internet-based services.
- Misconception: The internet is entirely secure.
 - Clarification: While security measures exist, the internet is susceptible to various threats, including malware, phishing, hacking, and data breaches. Understanding and implementing cybersecurity measures are essential for safe internet usage.
- Misconception: HTTP and HTTPS are the same protocols.
 - Clarification: While both HTTP (Hypertext Transfer Protocol) and HTTPS (Hypertext Transfer Protocol Secure) are protocols used for transmitting data over the internet, HTTPS encrypts data to provide secure communication between a web browser and a web server, whereas HTTP does not encrypt data.
- Misconception: The terms "router" and "modem" are interchangeable.
 - Clarification: A router and a modem serve different functions. A modem connects a device to the internet service provider (ISP), while a router routes data between devices within a network and manages traffic between the local network and the internet. Some devices, known as combination or gateway devices, function as both a modem and a router.

Differentiation through *Universal Design for Learning*

UDL Indicator	Teacher Actions:
<p>Representation: Clarify Terms and Symbols</p>	<ul style="list-style-type: none"> ● Pre-teach vocabulary and symbols, especially in ways that promote connection to the learners' experience and prior knowledge ● Highlight how complex terms, expressions, or equations are composed of simpler words or symbols ● Embed support for vocabulary and symbols within the text (e.g., hyperlinks or footnotes to definitions, explanations, illustrations, previous coverage, translations) ● Embed support for unfamiliar references within the text (e.g., domain specific notation, lesser known properties and theorems, idioms, academic language, figurative language, mathematical language, jargon, archaic language, colloquialism, and dialect)

Supporting Multilingual/English Learners

Related CELP standards:		Learning Targets:
<p>An EL can . . . determine the meaning of words and phrases in oral presentations and literary and informational text.</p> <ul style="list-style-type: none"> ● I can explain how internet protocols, data packets and data centers support website functionality. ● Level 1: I can recognize words like "internet," "data," "packets," and "center" in pictures or simple diagrams. ● Level 2: I can understand basic explanations of how internet protocols, data packets, and data centers support website functionality with the help of visual aids and simple explanations. ● Level 3: I can understand and explain, using context, some visual aids, and basic English morphology, how internet protocols, data packets, and data centers support website functionality. ● Level 4: I can explain, using context and increasingly complex visual aids, how internet protocols, data packets, and data centers support website functionality. ● Level 5: I can use context and complex visual aids to explain how internet protocols, data packets, and data centers support website functionality. 		
Lesson Sequence	Learning Target	Success Criteria/Assessment/Resources
1 Internet basics (1-block)	<ul style="list-style-type: none"> ● I can understand how the internet works and can determine strategies for effective use. 	<ul style="list-style-type: none"> ● I can understand important terms related to the internet. ● I can compare the internet to other computer tools. ● I can explain how the internet functions and how it is used by society. ● I can determine strategies for effective internet use.
2 Internet History (1-block)	<ul style="list-style-type: none"> ● I can create a timeline to show the history of the internet. 	<ul style="list-style-type: none"> ● I can describe the predecessors to the internet. ● I can analyze how and why the Internet was created. ● I can analyze how the internet has progressed through three distinct eras. ● I can theorize how the internet can change in the future. ● I can create a clear visual representation of the history of the internet.
3 Internet Safety (1-2 blocks)	<ul style="list-style-type: none"> ● I can explain the importance of privacy settings and their impact on society. 	<ul style="list-style-type: none"> ● I can describe common internet security threats (malware, phishing, etc.). ● I can explain methods for securing personal information online (using strong passwords, encryption, etc.).
4 How Websites Work (1-2 blocks)	<ul style="list-style-type: none"> ● I can explain how internet protocols, data packets and data centers support website functionality. 	<ul style="list-style-type: none"> ● I can recognize the various physical components of the internet (servers, routers, cables, etc.). ● I can understand the difference between the World Wide Web (WWW) and the internet.

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|--|--|---|
| | | <ul style="list-style-type: none">● I can identify and explain common internet protocols (HTTP, HTTPS, TCP/IP, DNS, etc.).● I can describe how data packets are transmitted and support website functionality.● I can understand the client-server model and how it functions in web browsing.● I can explain the role of data centers and how they contribute to website functionality. |
|--|--|---|

Unit Title:	
Web Design Elements	
Relevant Standards: Bold indicates priority	
<ul style="list-style-type: none"> ● ISTE 1.4; MBA. ITPC 01.03; ITC 03.01; ITC 03.03; ITC 10.08; ITPC 01.01; ITPC 01.02; ITPC 01.03; ITPC 01.04; ITPC 01.06; ITPC 01.07; ITPC 01.08 	
Essential Question(s):	Enduring Understanding(s):
<ul style="list-style-type: none"> ● What factors influence the design decisions for creating an effective website layout? ● How can design choices impact user engagement and achieve desired outcomes on a website? 	<p>Effective Website Design Principles:</p> <ul style="list-style-type: none"> ● Understanding the principles of effective website design, including layout, navigation, and visual appeal, is essential for creating user-friendly and engaging websites. <p>Audience-Centric Design:</p> <ul style="list-style-type: none"> ● Designing with the target audience in mind, considering their demographics, interests, and needs, is crucial for creating websites that resonate with users and meet their expectations. <p>User Experience (UX) and Accessibility:</p> <ul style="list-style-type: none"> ● Prioritizing user experience and ensuring accessibility for all users, including those with disabilities, enhances usability and inclusivity of websites. <p>Consistent Visual Identity:</p> <ul style="list-style-type: none"> ● Maintaining a consistent visual identity, including color scheme, typography, and imagery, across the website strengthens branding and user recognition. <p>Content Organization and Navigation:</p> <ul style="list-style-type: none"> ● Structuring website content effectively and designing intuitive navigation promotes easy access to information and enhances user satisfaction. <p>Engagement through Visual Elements:</p> <ul style="list-style-type: none"> ● Incorporating relevant and purposeful graphic elements that align with content and goals can enhance user engagement and support desired outcomes. <p>Strategic Use of Graphics:</p> <ul style="list-style-type: none"> ● Understanding how to strategically use graphics to support call-to-action elements and drive user interaction is essential for achieving website objectives. <p>Optimization for Web Performance:</p> <ul style="list-style-type: none"> ● Creating optimized graphics and adhering to best practices for web use ensures fast loading

	<p>times and optimal website performance across devices and platforms.</p> <p>Adaptation to Changing Needs:</p> <ul style="list-style-type: none"> ● Recognizing that website design is an iterative process, adaptable to changing needs and user feedback, ensures ongoing improvement and relevance. <p>Alignment with Business Goals:</p> <ul style="list-style-type: none"> ● Understanding how design choices align with business goals and objectives helps create websites that contribute to overall organizational success.
Demonstration of Learning:	Pacing for Unit
Development of basic website	9 blocks
Integration of Technology:	
Chromebooks, desktop computers with windows	
Unit-specific Vocabulary:	
Accessibility, Alt Text, Call-to-Action (CTA), CMS (Content Management System), Color Scheme, CSS (Cascading Style Sheets), Graphic Elements, HTML (Hypertext Markup Language), Iterative Design, Navigation, Responsive Design, Sitemap, Target Audience, Typography, Usability Testing, User Experience (UX), Visual Identity, Web Optimization, Website Design Principles, Wireframe.	
Anticipated misconceptions:	
<ul style="list-style-type: none"> ● Misconception: A visually appealing website design is all about using bright colors and fancy graphics. <ul style="list-style-type: none"> ○ Clarification: While visual appeal is important, effective website design goes beyond aesthetics. It involves creating a design that aligns with the website's purpose and target audience. Sometimes, simple and clean designs can be more effective than overly flashy ones. ● Misconception: All users interact with websites in the same way, so designing for one type of user is sufficient. <ul style="list-style-type: none"> ○ Clarification: Different users have varying needs and preferences. Effective website design considers a diverse range of users, including those with disabilities, various cultural backgrounds, and different levels of technological proficiency. ● Misconception: As long as the website looks good on my device, it will look good on all devices. <ul style="list-style-type: none"> ○ Clarification: Website design should be responsive, meaning it adapts to different screen sizes and devices. What looks good on a desktop may not translate well to a mobile device. Testing across various devices and screen sizes is crucial for ensuring a consistent user experience. ● Misconception: Adding lots of graphics and animations will make the website more engaging. <ul style="list-style-type: none"> ○ Clarification: While visuals can enhance engagement, overloading a website with graphics and animations can lead to slow loading times and distract from the main content. Graphics should be purposeful and relevant to the content and should not hinder website performance. ● Misconception: Accessibility features are only necessary for users with disabilities. <ul style="list-style-type: none"> ○ Clarification: Accessibility features benefit all users, not just those with disabilities. For example, providing alt text for images helps users understand the content when images don't load or if they're using a screen reader. Ensuring proper color contrast benefits users in various lighting conditions or with vision impairments. 	

- **Misconception:** Once a website is designed, it doesn't need further updates or changes.
 - **Clarification:** Websites should be regularly updated and adapted to meet changing user needs and technological advancements. Regular maintenance, content updates, and usability testing are essential for keeping a website relevant and effective.
- **Misconception:** Designing a website is all about personal preference.
 - **Clarification:** While personal preferences play a role, effective website design is primarily driven by user research and best practices. Design decisions should be based on audience needs, usability studies, and established design principles rather than personal opinions.

Differentiation through [Universal Design for Learning](#)

UDL Indicator

Representation: Guide information processing and visualization

Teacher Actions:

- Give explicit prompts for each step in a sequential process
- Provide options for organizational methods and approaches (tables and algorithms for processing mathematical operations)
- Provide interactive models that guide exploration and new understandings
- Introduce graduated scaffolds that support information processing strategies
- Provide multiple entry points to a lesson and optional pathways through content (e.g., exploring big ideas through dramatic works, arts and literature, film and media)
- “Chunk” information into smaller elements
- Progressively release information (e.g., sequential highlighting)
- Remove unnecessary distractions unless they are essential to the instructional goal

Supporting Multilingual/English Learners

Related [CELP standards:](#)

Learning Targets:

An EL can . . . adapt language choices to purpose, task, and audience when speaking and writing.

- **I can define the best layout for my website design and anticipated audience.**
- **Level 1:** With prompting and supports,
 - Adapt language to describe website layout and audience with emerging control.
 - Use some general academic and content-specific words related to website design.
 - Express basic ideas about the best website layout for a given audience.
- **Level 2:** With prompting and supports,
 - Adapt language to describe website layout and audience with emerging control.
 - Use some general academic and content-specific words related to website design.
 - Express basic ideas about the best website layout for a given audience.
- **Level 3:** With guidance and supports,
 - Adapt language choices and style according to purpose, task, and audience with developing ease.

- Use an increasing number of general academic and content-specific words and expressions related to website design.
- Show developing control of style and tone when discussing website layout.
- Level 4:
 - Adapt language choices and style according to purpose, task, and audience.
 - Use a wider range of complex general academic and content-specific words and phrases related to website design.
 - Adopt and maintain a formal style in discussing website layout, as appropriate.
- Level 5:
 - Adapt language choices and style according to purpose, task, and audience with ease.
 - Use a wide variety of complex general academic and content-specific words and phrases proficiently in discussing website design.
 - Employ both formal and informal styles effectively when discussing website layout, depending on the context.

Lesson Sequence	Learning Target	Success Criteria/Assessment/Resources
1 Layout (1 block)	<ul style="list-style-type: none"> ● I can define the best layout for my website design and anticipated audience. 	<ul style="list-style-type: none"> ● I can define different common web page layouts. ● I can define the target audience for the website, considering demographics, interests, and needs. ● I can determine the appropriate content structure based on the website's purpose and target audience. ● I can ensure that the website layout promotes a positive user experience by minimizing clutter and distractions. ● I can ensure the website design is accessible to users with disabilities by adhering to accessibility guidelines (e.g., WCAG).
2 Navigation (1 block)	<ul style="list-style-type: none"> ● I can design the navigation of my website to support the intended outcomes and audience. 	<ul style="list-style-type: none"> ● I can interpret and create a sitemap for an existing website. ● I can use a sitemap to make inferences about how web designers link pages to each other. ● I can ensure that navigation elements remain consistent across all pages of the website. ● I can ensure that users can easily navigate between pages without confusion or disorientation. ● I can ensure navigation is accessible to users with disabilities, adhering to web accessibility standards (e.g., keyboard navigation, proper use of alt text for images).
3 Theme (2-3 blocks)	<ul style="list-style-type: none"> ● I can design the theme (color, typography, etc) of my website to 	<ul style="list-style-type: none"> ● I can design a color scheme that aligns with the branding or theme of the website.

	<p>attract the intended audience and outcomes.</p>	<ul style="list-style-type: none"> ● I can use colors that evoke the desired emotional response or mood from the audience in my design (e.g., calming, energetic, professional). ● I can ensure that visual elements such as color, typography, and imagery are consistent throughout the website. ● I can make design choices that reflect a cohesive and unified visual identity that resonates with the intended audience. ● I can ensure typography is legible and appropriate for the content and audience. ● I can use font styles, sizes, and spacing to enhance readability, accessibility, and user experience. ● I can make design choices that are informed by research or analysis of the target audience's preferences, demographics, and psychographics.
<p>4 Graphic Elements (1-2 blocks)</p>	<ul style="list-style-type: none"> ● I can add graphic elements to my website to attract the intended audience and drive desired outcomes. 	<ul style="list-style-type: none"> ● In my design, I can make sure graphics are directly related to the content and purpose of the website. ● In my design, each graphic serves a specific purpose in enhancing user engagement or conveying information ● I can align graphic elements with the overall branding and visual identity of the website. ● I can ensure graphics are accessible to users with disabilities, adhering to web accessibility standards (e.g., providing alt text for images, ensuring color contrast for visual elements). ● I can strategically place graphics to support call-to-action (CTA) elements and drive desired outcomes (e.g., prompting users to make a purchase, sign up for a newsletter, or contact the business). ● I can select and create optimized graphics for web use to ensure fast loading times and optimal performance.

Unit Title:	
HTML	
Relevant Standards: Bold indicates priority	
ITPC 01.13; ITC 08.01; ITC 09.01; ITC 10.08; ITPC 01.02; ITPC 01.06; ITPC 01.07; ITPC 01.08	
Essential Question(s):	Enduring Understanding(s):
<ul style="list-style-type: none"> ● How do HTML elements and tags support the design and navigation of a website? ● How does understanding HTML contribute to the creation of an effective website design? ● In what ways can the use of semantic HTML elements improve the accessibility and usability of a website? 	<ul style="list-style-type: none"> ● HTML is the foundation of web development: Students understand that HTML (Hypertext Markup Language) serves as the fundamental building block for creating web pages. They recognize that proficiency in HTML is essential for structuring content, organizing information, and enhancing user experience on the web. ● Effective website design requires a combination of technical and creative skills: Students grasp that designing a visually appealing and functional website involves a blend of technical knowledge of HTML coding and creative skills in graphic design, typography, and layout. They understand that successful web development entails balancing technical constraints with aesthetic considerations to achieve the desired outcomes. ● Semantic markup enhances accessibility and usability: Students learn that using semantic HTML elements contributes to the accessibility and usability of a website. They understand the importance of structuring content with semantic tags to improve search engine visibility, assistive technology compatibility, and overall user comprehension. ● Web development involves continuous learning and adaptation: Students recognize that the field of web development is dynamic and constantly evolving. They understand the need to stay updated with new HTML standards, emerging technologies, and best practices to create modern, responsive, and user-friendly websites that meet the evolving needs of both developers and users.

Demonstration of Learning:	Pacing for Unit
Write a simple HTML code for a website	14 blocks
Integration of Technology:	
Chromebooks, desktop computers with windows.	
Unit-specific Vocabulary:	
Accessibility, Aesthetic Considerations, Assistive Technology, Backend Functionality, Cascading Style Sheets (CSS), Content Structure, Creative Skills, Dynamic, Emerging Technologies, HTML (Hypertext Markup Language), Interactivity, Responsive, Search Engine Optimization (SEO), Semantic Markup, Technical Knowledge, Typography, Usability, User Experience (UX), User Needs.	
Anticipated misconceptions:	
<ul style="list-style-type: none"> ● Misconception: HTML is the only language needed for web development. <ul style="list-style-type: none"> ○ Clarification: While HTML is fundamental, web development involves more than just HTML. CSS (Cascading Style Sheets) is used for styling and layout, JavaScript for interactivity, and other languages and frameworks for backend functionality. HTML provides the structure, but a combination of languages and technologies is necessary for full website development. ● Misconception: Effective website design is primarily about making the website look pretty. <ul style="list-style-type: none"> ○ Clarification: Effective website design goes beyond aesthetics; it's about creating a user-friendly and functional experience. While visual appeal is important, functionality, usability, and accessibility are equally crucial. Design decisions should prioritize user needs and goals over purely aesthetic considerations. ● Misconception: Semantic markup is only about improving search engine rankings. <ul style="list-style-type: none"> ○ Clarification: Semantic markup serves multiple purposes beyond SEO (Search Engine Optimization). While it does improve search engine visibility by providing context to search engines, it also enhances accessibility for users with disabilities. Semantic HTML elements improve screen reader compatibility and help all users better understand the content and structure of a webpage. ● Misconception: Once you learn HTML, you don't need to update your skills. <ul style="list-style-type: none"> ○ Clarification: Web development is a continuously evolving field. HTML standards, as well as best practices and technologies, are constantly changing. It's important for developers to stay updated with the latest developments, tools, and techniques to create modern and responsive websites. Ongoing learning and adaptation are essential for staying relevant in web development. 	
Differentiation through <i>Universal Design for Learning</i>	
UDL Indicator	Teacher Actions:
Representation: Clarify syntax and structure	<ul style="list-style-type: none"> ● Clarify unfamiliar syntax (in language or in math formulas) or underlying structure (in diagrams, graphs, illustrations, extended expositions or narratives) through alternatives that: ● Highlight structural relations or make them more explicit ● Make connections to previously learned structures

- Make relationships between elements explicit (e.g., highlighting the transition words in an essay, links between ideas in a concept map, etc.)

Supporting Multilingual/English Learners

Related **CELP standards:**

Learning Targets:

An EL can construct meaning from oral presentations and literary and informational text through grade appropriate listening, reading, and viewing.

I can organize my page by adding divs, spans, and semantic tags with the HTML programming language.

Level 1: With prompting and support, use a very limited set of strategies to:

- Identify basic HTML tags such as <div>, , and <p>.
- Recognize a few key words and phrases related to HTML coding.
- Follow basic instructions to add simple tags to a webpage.

Level 2: With prompting and support, use an emerging set of strategies to:

- Identify the main purpose of HTML tags like <div>, , and <p>.
- Retell a few key details about the usage of these tags in organizing a webpage.
- Explain how these tags help in structuring content on a webpage.

Level 3: With guidance and support, use a developing set of strategies to:

- Determine the central idea of organizing a webpage using divs, spans, and semantic tags.
- Explain how the theme of page organization is developed by specific details in the HTML code.
- Summarize the purpose of divs, spans, and semantic tags in organizing content on a webpage.

Level 4: Use an increasing range of strategies to:

- Determine two central ideas of organizing a webpage using divs, spans, and semantic tags.
- Analyze the development of these ideas by examining specific HTML tags and their roles.
- Cite specific details and evidence from the HTML code to support the analysis.
- Summarize the overall structure of a webpage using divs, spans, and semantic tags.

Level 5: Use a wide range of strategies to:

- Determine central ideas of organizing a webpage using divs, spans, and semantic tags.
- Analyze the development of these ideas by thoroughly examining the HTML code.
- Cite specific details and evidence from the HTML code to support the analysis.
- Summarize the key principles of structuring a web page using divs, spans, and semantic tags.

Lesson Sequence	Learning Target	Success Criteria/Assessment/Resources
1 HTML Skeleton (1 block)	<ul style="list-style-type: none"> ● I can use the HTML programming language to code a website. 	<ul style="list-style-type: none"> ● I can understand and identify the parts of the HTML skeleton. ● I can create the HTML Skeleton.
2 HTML Formatting Text (1-2 blocks)	<ul style="list-style-type: none"> ● I can format text using the HTML programming language. 	<ul style="list-style-type: none"> ● I can utilize tags such as <h1>-<h6> for headings, <p> for paragraphs, and / with for lists. ● I can apply text formatting tags like , , <u>, and
 as needed.

		<ul style="list-style-type: none"> ● I can implement navigation menus with <code><nav></code> and <code>/</code> tags.
3 HTML Links (1 block)	<ul style="list-style-type: none"> ● I can link elements using the HTML programming language. 	<ul style="list-style-type: none"> ● I can create hyperlinks using the <code><a></code> tag with appropriate href attributes.
4 HTML Media (1-2 blocks)	<ul style="list-style-type: none"> ● I can insert images and media using the HTML programming language. 	<ul style="list-style-type: none"> ● I can embed images using the <code></code> tag with correct src and alt attributes. ● I can integrate multimedia content with <code><audio></code> and <code><video></code> tags.
5 HTML Tables and Forms (2-3 blocks)	<ul style="list-style-type: none"> ● I can insert and format tables and forms using the HTML programming language 	<ul style="list-style-type: none"> ● I can create tables using <code><table></code>, <code><tr></code>, <code><th></code>, and <code><td></code> tags for tabular data. ● I can construct forms with <code><form></code>, <code><input></code>, <code><select></code>, and <code><textarea></code> tags for user input.
6 HTML Organization (1-2 blocks)	<ul style="list-style-type: none"> ● I can organize my page by adding divs, spans, and semantic tags with the HTML programming language. 	<ul style="list-style-type: none"> ● I can use <code><div></code> and <code></code> to section out my page. ● I can use the semantic tags to structure my page.

Unit Title:	
CSS	
Relevant Standards: Bold indicates priority	
ISTE 1.4; ITPC 01.13; ITC 08.01; ITC 09.01; ITC 10.08; ITPC 01.01; ITPC 01.02; ITPC 01.03; ITPC 01.04; ITPC 01.05; ITPC 01.06; ITPC 01.07; ITPC 01.08	
Essential Question(s):	Enduring Understanding(s):
<ul style="list-style-type: none"> • How do CSS properties enhance the visual presentation of HTML elements on a webpage? • What are the various methods of applying CSS properties to HTML elements, and when should each method be used? • How can the principles of cascading and specificity impact the application of CSS properties in web development? 	<ul style="list-style-type: none"> • CSS enhances the presentation of HTML elements: Students understand that CSS (Cascading Style Sheets) is essential for controlling the appearance and layout of HTML elements on a webpage. They recognize that proficiency in CSS enables them to apply visual styles, such as colors, fonts, spacing, and positioning, to enhance the aesthetic appeal and usability of a website. • Different methods for applying CSS properties: Students grasp the various techniques for applying CSS properties to HTML elements, including inline styling, wildcard styling, tag selection, class selection, and ID selection. They understand the advantages, limitations, and appropriate use cases for each method, considering factors such as specificity, maintainability, and ease of styling. • Cascading and specificity principles in CSS: Students learn about the principles of cascading and specificity in CSS, understanding how these concepts determine the precedence and resolution of conflicting styles. They recognize the importance of understanding the order of precedence in CSS styling and the implications for managing style sheets, avoiding conflicts, and achieving consistent styling across a website.
Demonstration of Learning:	Pacing for Unit
Internet timeline, development of safety setting	13 blocks

Integration of Technology:

Chromebooks, desktop computers with windows

Unit-specific Vocabulary:

Aesthetic Appeal, Cascading Style Sheets (CSS), Class Selection, CSS Property, HTML (Hypertext Markup Language), ID Selection, Inline Styling, Semantic Markup, Specificity, Tag Selection, Wildcard Styling.

Anticipated misconceptions:

- **Misconception:** CSS is only used for changing text styles.
 - **Clarification:** While CSS can indeed be used to style text, it also encompasses a wide range of properties for controlling the layout, appearance, and behavior of HTML elements beyond just text. This includes properties for colors, backgrounds, borders, spacing, positioning, and more.
- **Misconception:** Inline styling is the best and most efficient way to apply CSS properties.
 - **Clarification:** While inline styling can be convenient for quick adjustments to individual elements, it is generally not recommended for larger-scale styling tasks due to its lack of separation of concerns and potential difficulty in maintaining consistency across multiple pages. External style sheets linked via <link> tags or internal style sheets within <style> tags offer better organization, reusability, and maintainability.
- **Misconception:** Classes and IDs serve the same purpose in CSS.
 - **Clarification:** Classes and IDs have different purposes and usage patterns in CSS. Classes are typically used for styling multiple elements that share common characteristics, while IDs are intended to uniquely identify a single element on a page. Additionally, classes can be applied to multiple elements, while IDs should be unique within a document. Understanding these distinctions is important for proper CSS styling and HTML structure.
- **Misconception:** CSS specificity is solely determined by the order of rules in the style sheet.
 - **Clarification:** CSS specificity is determined by a combination of factors, including the type of selector used (e.g., tag, class, ID), the number of selectors, and any inline styles. It's not solely based on the order of rules in the style sheet. This misconception can lead to confusion about why certain styles are not being applied as expected and highlights the importance of understanding specificity rules in CSS.

Differentiation through [Universal Design for Learning](#)

UDL Indicator

Representation: Activate or supply background knowledge

Teacher Actions:

- Anchor instruction by linking to and activating relevant prior knowledge (e.g., using visual imagery, concept anchoring, or concept mastery routines)
- Pre-teach critical prerequisite concepts through demonstration or models
- Bridge concepts with relevant analogies and metaphors
- Make explicit cross-curricular connections (e.g., teaching literacy strategies in the social studies classroom)

Supporting Multilingual/English Learners		
Related <i>CELP standards:</i>		Learning Targets:
<p>An EL can . . . adapt language choices to purpose, task, and audience when speaking and writing.</p> <ul style="list-style-type: none"> ● I can develop a website to meet defined specifications using HTML and CSS. ● Level 1: With prompting and supports, <ul style="list-style-type: none"> ○ Adapt language to describe website layout and audience with emerging control. ○ Use some general academic and content-specific words related to website design. ○ Express basic ideas about the best website layout for a given audience. ● Level 2: With prompting and supports, <ul style="list-style-type: none"> ○ Adapt language to describe website layout and audience with emerging control. ○ Use some general academic and content-specific words related to website design. ○ Express basic ideas about the best website layout for a given audience. ● Level 3: With guidance and supports, <ul style="list-style-type: none"> ○ Adapt language choices and style according to purpose, task, and audience with developing ease. ○ Use an increasing number of general academic and content-specific words and expressions related to website design. ○ Show developing control of style and tone when discussing website layout. ● Level 4: <ul style="list-style-type: none"> ○ Adapt language choices and style according to purpose, task, and audience. ○ Use a wider range of complex general academic and content-specific words and phrases related to website design. ○ Adopt and maintain a formal style in discussing website layout, as appropriate. ● Level 5: <ul style="list-style-type: none"> ○ Adapt language choices and style according to purpose, task, and audience with ease. ○ Use a wide variety of complex general academic and content-specific words and phrases proficiently in discussing website design. ○ Employ both formal and informal styles effectively when discussing website layout, depending on the context. 		
Lesson Sequence	Learning Target	Success Criteria/Assessment/Resources
1 Introduction to CSS (2 blocks)	<ul style="list-style-type: none"> ● I can understand the different ways of applying CSS properties to HTML elements. 	<ul style="list-style-type: none"> ● I can understand what a CSS property is. ● I can apply CSS properties to an element using inline styling. ● I can apply CSS properties to an element using wildcard styling. ● I can link a stylesheet to my HTML document.
2 CSS by Tag (1-2 blocks)	<ul style="list-style-type: none"> ● I can apply CSS properties to HTML elements by selecting via Tag. 	<ul style="list-style-type: none"> ● I can apply text formatting CSS properties via tag ● I can overwrite formatting by wildcard using tag styling.

<p>3 CSS by Class (1-2 blocks)</p>	<ul style="list-style-type: none"> ● I can apply CSS properties to HTML elements by selecting via Class. 	<ul style="list-style-type: none"> ● I can apply text formatting CSS properties via class ● I can overwrite formatting by Tag using Class styling.
<p>4 CSS by Id (1-2 blocks)</p>	<ul style="list-style-type: none"> ● I can apply CSS properties to HTML elements by selecting via Id. 	<ul style="list-style-type: none"> ● I can apply text formatting CSS properties via id. ● I can overwrite formatting by Class using Id styling. ● I can overwrite formatting by Id using inline styling.
<p>5 Culminating Project: Website Development (4-5 Blocks)</p>	<ul style="list-style-type: none"> ● I can develop a website to meet defined specifications using HTML and CSS. 	<ul style="list-style-type: none"> ● I can review project specifications. ● I can design a website that meets the clients needs. ● I can select the best layout for my website design and anticipated audience. ● I can design the navigation of my website to support the intended outcomes and audience. ● I can design the theme (color, typography, etc) of my website to attract the intended audience and outcomes. ● I can add graphic elements to my website to attract the intended audience and drive desired outcomes. ● I can code for the desired elements using HTML and CSS.