

# Board of Education Meeting

Wednesday, March 6, 2024 7:00 PM

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

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

2. **STAFF AND STUDENT RECOGNITION**

3. **APPROVAL OF MINUTES**

4. **COMMITTEE REPORTS**

5. **STUDENT REPRESENTATIVE REPORTS**

6. **CHAIR REPORT**

7. **SUPERINTENDENT REPORT**

8. **CONSENT AGENDA**

8.1. PERSONNEL

8.1.a. Teacher Retirements - Effective June 30, 2024

8.1.b. Teacher Resignations

8.1.c. New Teacher Hires

8.1.d. A-1 Resignation - Effective June 17, 2024

8.1.e. A-2 Resignation - Effective June 17, 2024

8.2. GRANTS

8.2.a. 2024 Every Child Art Experience Grant - CT Office of the Arts and the Dept. of Economic Development

9. **PUBLIC COMMENT**

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

10.1. FY 25 Superintendent's Recommended Budget

10.2. Healthy Foods Certification for the 2024-2025 School Year

10.3. 23-24 School Year Calendar Revision - Waiver of 181 School Days Rule

10.4. 2023-2024 School Year Calendar Amendment - 2024 Primary Day

10.5. BECC Classrooms at the Former West Woods School (now Beals Senior Center) Returned to the City

10.6. Increasing Educator Diversity Draft Plan Submission - Alliance Grant (Carve-Out)

10.7. Main Street Foundation Donation

10.8. Innovate and Elevate Continuation Plan  
Approval

10.9. Office of Teaching and Learning Report -  
Fall Fine Arts Report

10.10. Special Services Report

**11. CURRICULUM REVISION**

11.1. AP Pre-Calculus - New Curriculum

11.2. Grade 7 Mathematics - Revised Curriculum

11.3. PreK Music Curriculum

11.4. PreK Library Curriculum

**12. POLICY REVISION**

12.1. Policy 1326 - Community Board Operation

12.2. Policy 5144.4 - Recess Policy

**13. NEW BUSINESS**

**14. BUILDING REPORTS**

**15. INFORMATION/LIAISON REPORTS**

16. **Vote to Convene Into Executive Session for the  
*purpose of:***

17. **Vote to Convene Into Public Session**

**18. ADJOURNMENT**

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: [February 7, 2024 Regular Meeting Recording](#).

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

The Bristol Board of Education meeting was held on Wednesday, February 7, 2024, at 7:00 p.m. at the Bristol Board of Education auditorium and via the Zoom Meeting Platform.

**PRESENT:** Commissioners: Russell Anderson, Jill Fitzsimons-Bula, Eric Carlson, Kristen Giantonio, Lorianne Osenkowski, Shelby Pons, Jennifer Van Gorder

**EXCUSED:** Commissioners: Dante Tagariello and Maria Simmons

**ALSO PRESENT:** Dr. Catherine Carbone, Superintendent, and Dr. Michael Dietter, Deputy Superintendent

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

Vice Chair Pons called the meeting to order at 7:01 p.m. and asked the audience to stand for the Pledge of Allegiance.

Vice Chair Pons asked the audience for a moment of silence for Anthony (Tony) Rocco Benvenuto a custodian at Memorial Boulevard School and Barbara J. Grasso who had a 35-year career as an Art Teacher and Director of Art at O'Connell School.

**2. STAFF AND STUDENT RECOGNITION**

The Board of Education recognized the following students:

Anastasiya Samoylyuk at BEHS received a \$500.00 Scholarship from the College Board Big Future Scholarship and Emily Skorupski at BEHS received a \$500.00 Scholarship from the College Board Big Future Scholarship. Emily was present online to be recognized and spoke briefly about the scholarship. Anastasiya had a prior commitment and was unable to attend. Congratulations to both students.

**3. APPROVAL OF MINUTES**

**January 3, 2024 – Regular Meeting Minutes**

On a motion by Jennifer Van Gorder, seconded by Kristen Giantonio;

*The Board of Education voted to approve the January 3, 2024, Regular Meeting Minutes as written. With five (5) Commissioners, Fitzsimons-Bula, Giantonio, Osenkowski, Van Gorder, and Pons in favor of the motion. Commissioners Anderson and Carlson Abstained.*

**January 16, 2024 - Budget Workshop Meeting Minutes**

On a motion by Jennifer Van Gorder, seconded by Lorianne Osenkowski;

*The Board of Education unanimously voted to approve the written January 16, 2024, Budget Workshop Meeting Minutes. With seven (7) Commissioners, Anderson, Carlson, Fitzsimons-Bula, Giantonio, Osenkowski, Van Gorder, and Pons in favor of the motion.*

**January 16, 2024 - Special BoE Meeting Minutes**

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

*The Board of Education unanimously voted to approve the January 16, 2024, Special BoE Meeting Minutes as written. With seven (7) Commissioners, Anderson, Carlson, Fitzsimons-Bula, Giantonio, Osenkowski, Van Gorder, and Pons in favor of the motion*

**January 23, 2024 - Budget Workshop Meeting Minutes**

On a motion by Jennifer Van Gorder, seconded by Kristen Giantonio;

*The Board of Education unanimously voted to approve the January 23, 2024, Budget Workshop Meeting Minutes as written. With seven (7) Commissioners, Anderson, Carlson, Fitzsimons-Bula, Giantonio, Osenkowski, Van Gorder, and Pons in favor of the motion*

**January 24, 2024 - Special BoE Meeting Minutes**

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

*The Board of Education voted to approve the January 24, 2024, Special BoE Meeting Minutes as written. With six (6) Commissioners, Carlson, Fitzsimons-Bula, Giantonio, Osenkowski, Van Gorder, and Pons in favor of the motion. Commissioner Anderson Abstained.*

**4. COMMITTEE REPORTS**

**Student Achievement**

Commissioner Fitzsimons-Bula reported that the committee met on January 17<sup>th</sup>. The committee voted to approve the 2024 Student Achievement meeting dates. Commissioners heard seven curricular revisions that were voted to the full board for approval, and they will be presented later this evening. One informational item was presented which was an update on the K through 3 reading waiver; which the Bristol Public Schools curriculum received positive feedback, the next steps include providing a scope and sequence for vocabulary and comprehension. The next meeting is scheduled for February 21st at 6:30 p.m.

**Policy**

Commissioner Pons reported that a Special Policy Committee meeting was held on January 9<sup>th</sup>. The committee discussed and revised Bylaw 9132 – Standing Committees. The revisions included combining Finance and Operations, adding a new committee on School Safety adding School climate to student achievement to receive information on current and future practices and prepare for upcoming legislative mandates. The duties and responsibilities of each committee to better align with the CAFE model policy. Committee assignments, the Finance and Operation calendar, the School Safety calendar, and School, Family, and Community Partnership calendars were moved to a Special Meeting on January 16<sup>th</sup> where all were voted on and passed unanimously. At the regularly scheduled Policy Committee meeting held on January 24<sup>th</sup>, the committee was updated by Commissioner Tagariello that the City had changed the charter to allow the sale and consumption of alcohol for non-school functions at the BAIMS theater. This will also require the policy subcommittee to revise multiple policies and the board lawyer is currently working on those revisions. The committee also continued its discussion of Policy 5144 - Discipline and Recess and decided to continue that discussion and make the necessary revisions at this month's policy meeting. The committee also received an update from Dr Dieter on menstrual equity and the legislative mandates. As of July 1, 2024, to comply, each school is required to designate a menstrual Equity coordinator typically an administrator or their designee. Finally, we discussed and moved Policy 5111 – Admission Age and Policy 5112 – Ages of Attendance out of the committee and to the full Board for a vote.

## 5. STUDENT REPRESENTATIVE REPORTS

### **Bristol Central High School**

BCHS Junior Student Representative, Abigail Wasta reported on Bristol Central High School activities for January. Highlights from her report included a sports team update, the Southside School Italian program author talk and book signing, the Spanish Elementary Club at South Side continues with additional language learning, midterm completion; the start of Semester 2; the start of class selections for the 2024 2025 school year; 8th-grade orientation; AP exam preparation and seniors awaiting college decisions.

### **Bristol Eastern High School**

BEHS Junior Student Representative, Peyton Troth reported on Bristol Eastern High School activities for February. Highlights from her report included the sports teams doing well, the blue crew working with the Alzheimer's Association, and wearing purple at the next few athletic events to raise awareness and money for the Alzheimer's Association; a February 15<sup>th</sup> schoolwide Save a Life demonstration; on February 16<sup>th</sup> there will be a read-in honor of Black History month; the conclusion of midterms; the start of second semester; college decisions for seniors, upcoming SAT's for juniors; course selection for underclassmen and planning for Prom is underway.

## 6. CHAIR REPORT

Vice Chair Pons reported that Commissioner Maria Pirro Simmons and herself were selected to participate in a Relational Leadership Institute for School, Family, and Community Partnerships she is currently in Santa Fe, New Mexico for the retreat component of the five-month program. Designed to provide the selected participants with experiences and tools to support trusting and mutually beneficial partnerships with families.

## 7. SUPERINTENDENT REPORT

Dr. Carbone presented the monthly Superintendent Report. Topics included in her report were Budget Workshops Overview, 2025-2030 Strategic Plan Update, February Winter Recess (Monday, February 19<sup>th</sup> and Tuesday, February 20<sup>th</sup>) and 2024-2025 Legislative Priorities.

## 8. CONSENT AGENDA

Vice Chair Pons called for a motion to approve the Consent Agenda, which included Items 8.1.a through 8.1.c.

On a motion by Jennifer Van Gorder, seconded by Kristen Giantonio;

*The Board of Education unanimously voted to approve the Consent Agenda (Items 8.1.a through 8.1.c.) as written.*

## PERSONNEL

### **8.1.a. Teacher Resignations**

Traner, Ashleeann - SSS - Library Media Specialist - Effective January 15, 2024

Cyr, Kaitlynn - EPH - Grade 1 Teacher - Effective January 22, 2024

Hamilton, Marissa - GHS - Special Education Teacher - Effective January 29, 2024

McLaughlin, Meredith - WBS - Psychologist - Effective February 5, 2024

On a motion by Jennifer Van Gorder, seconded by Kristen Giantonio;

*The Board of Education unanimously voted to approve the Teacher Resignations as written. With seven (7) Commissioners, Anderson, Carlson, Fitzsimons-Bula, Giantonio, Osenkowski, Van Gorder, and Pons in favor of the motion.*

**PERSONNEL – cont’d**

**8.1.b. New Teacher Hires**

DiCristofaro, Lynn - BCHS - Special Education Teacher - Effective January 30, 2024

Vilhotti, Emily - EPH - Special Education Teacher - Effective January 30, 2024

On a motion by Jennifer Van Gorder, seconded by Kristen Giantonio;

***The Board of Education unanimously voted to approve the New Teacher Hires as written. With seven (7) Commissioners, Anderson, Carlson, Fitzsimons-Bula, Giantonio, Osenkowski, Van Gorder, and Pons in favor of the motion.***

**8.1.c. Sixth-Year Salary Credit Effective February 1, 2024**

Darcy, Julia - Math Coach - Stafford Elementary

Fisher, Jessica - TESOL Teacher - Greene Hills

Tacinelli, Anne - Grade 5 Teacher - Greene Hills

On a motion by Jennifer Van Gorder, seconded by Kristen Giantonio;

***The Board of Education unanimously voted to approve the Sixth-Year Salary Credit as written. With seven (7) Commissioners, Anderson, Carlson, Fitzsimons-Bula, Giantonio, Osenkowski, Van Gorder, and Pons in favor of the motion.***

**9. PUBLIC COMMENT**

No members of the Public wished to address the Board.

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

**10.1. Special Services Report**

Amy Martino, Special Services Director presented the monthly Special Services Report. As of January 1, 2024, 1,810 of the 8,063 enrolled Bristol students are identified as requiring Special Education programming. This enrollment reflects 22.45% of the total BPS student population. As of January 1st, 120 students with disabilities require out-of-district placements at private special education school programs. There are 80 students requiring special education programming and services at other public out of district and that includes magnet schools. During December, 21% of the newly registered students were identified as students requiring special education programming at the time of registration; there were no newly enrolled students receiving their programming at out-of-district programs also during December, there were (33) 211 calls, and (9) 911 calls.

**10.2 Office of Talent Management Report - Enrollment**

Dr. Kim Culkin, Chief Officer, presented the monthly Enrollment report as of January 1, 2024. Bristol Public Schools has 8,121 students, 289 of our students are attending magnet schools or other public schools at the time the report was pulled. 121 students were attending out-of-district private programs, 28 students were attending Bristol Tech. Compared to the overall student enrollment for the district in January of 2023 we had 8,089 students so we have 32 more Bristol students overall in a January to January comparison. Dr. Culkin walked commissioners through a breakdown of student enrollment by building.

**10.3 Office of Finance Report - Student Activities**

Mrs. Lynn Boisvert, Business Administrator, presented the Student Activities Funds. BCHS Student activity account began with a \$180,220.46 balance and has \$60,836.40 in expenses and \$100,790.81 in receipts through 12-31-2023. The ending account balance is \$220,174.87. The BCHS Athletics account began with a \$54,463.95 balance with \$39,745.03 in expenses and \$32,160.11 in receipts through 12-31-2023. The ending account balance is \$46,879.03. BEHS Student activity account began with \$161,345.00 balance and has \$49,094.35 in expenses

### **10.3 Office of Finance Report - Student Activities – cont'd**

and \$81,839.12 in receipts through 12-31-2023. The ending balance is \$194,089.77. The BEHS Athletics account began with a \$12,489.69 balance with \$22,052.45 in expenses and \$10,247.61 in receipts through 12-31-2023. The ending account balance is \$684.85.

### **10.4 Office of Athletics Report - Fall Report**

Mrs. Cera Galluzzo, Director of Athletics, presented the End of Fall Season Report. This report discussed both Bristol Central and Bristol Eastern. The report detailed the 108 regular-season events held per school. The post-season recap for both schools and the All-State Winners. Mrs. Galluzzo shared her contact information and the newly created Facebook page - Bristol High School Athletics.

## **11. CURRICULUM REVISION**

### **11.1. Entrepreneurship - Second Reading**

This course is ideal for students looking to explore entrepreneurship and the idea of becoming a small business owner. Students will learn how to set up their business, connect with customers, manage money, protect their assets, and grow their business ventures. By the end of the course, students will have a completed business plan to move forward with their business idea.

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

***The Board of Education unanimously voted to approve the Entrepreneurship Curriculum Revision as written. With seven (7) Commissioners, Anderson, Carlson, Fitzsimons-Bula, Giantonio, Osenkowski, Van Gorder, and Pons in favor of the motion.***

### **11.2. Architectural Concepts - Second Reading**

Students will design and model current and historical building styles using manual drafting, digital CAD, and physical model creation. Students will create models of homes, businesses, and public spaces.

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

***The Board of Education unanimously voted to approve Architectural Concepts Revision as written. With seven (7) Commissioners, Anderson, Carlson, Fitzsimons-Bula, Giantonio, Osenkowski, Van Gorder, and Pons in favor of the motion.***

### **11.3. Advanced Acting**

This is a new curriculum for the Theater Pathway at BAIMS. The purpose of this course is to provide the student with the knowledge and skills necessary to develop a character through advanced methods in acting. Through the use of internal and external development, students will refine their process as a performer. Furthering the development of the actor's instrument, implementing advanced acting theory and practice, and employing styles in performance, students will explore contemporary and non-contemporary techniques in character analysis and creating roles. The course will culminate in a public performance.

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

***The Board of Education unanimously voted to approve the Advanced Acting Curriculum as written. With seven (7) Commissioners, Anderson, Carlson, Fitzsimons-Bula, Giantonio, Osenkowski, Van Gorder, and Pons in favor of the motion.***

#### **11.4. Theater Behind the Scenes**

Theater Behind the Scenes is a new curriculum for the Theater Pathway at BAIMS. In this class, students will explore the "behind the scenes" elements of production in the following disciplines: set design, costume design, lighting/electrics, and sound design, among other subcategories. Learn and apply knowledge and skills to design their own work. Students may have the opportunity to be a stage manager, call a show; act as crew moving sets, props, etc. during shows; operate a spotlight, lighting console, and audio console; set up a PA system and cabling for audio set-ups; and participate in best safety practices, including handling electrics and using proper body mechanics. Academic study and hands-on application provide a practical approach to production. Students may be required to work on the semester performance course production.

On a motion by Eric Carlson, seconded by Lorianne Osenkowski;

***The Board of Education unanimously voted to approve the Theater Behind the Scenes Curriculum as written. With seven (7) Commissioners, Anderson, Carlson, Fitzsimons-Bula, Giantonio, Osenkowski, Van Gorder, and Pons in favor of the motion.***

#### **11.5. Murals**

Murals is a new curriculum for the Art Pathway at BAIMS. Students will learn technical skills through accuracy in drawing from small-scale images to murals. Projects will be inspired by self-expression, building and beautifying our community, and engaging citizens. Murals will be designed on different mediums such as buildings, walls, and large-scale openings. Materials used will include paint, stencils, and projectors.

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

***The Board of Education unanimously voted to approve the Murals Curriculum as written. With seven (7) Commissioners, Anderson, Carlson, Fitzsimons-Bula, Giantonio, Osenkowski, Van Gorder, and Pons in favor of the motion.***

#### **11.6. Soundtrack Production - Second Reading**

Soundtrack Production is a new curriculum for the Art Pathway at BAIMS. Students will engage in the study of the aesthetic and technical practices of film music and sound. The focus will be on the interaction between soundtrack and image track, on the level of form, rhythm, style, and emotion, as well as on the creative processes of film scoring. The study of selected film scores illustrating the development of film scoring art will be combined with original projects where students will develop their own soundtracks.

On a motion by Eric Carlson, seconded by Lorianne Osenkowski;

***The Board of Education unanimously voted to approve Soundtrack Production as written. With seven (7) Commissioners, Anderson, Carlson, Fitzsimons-Bula, Giantonio, Osenkowski, Van Gorder, and Pons in favor of the motion.***

#### **11.7. Program of Studies**

The 2024-2025 Program of Studies was presented by Melanie Vetrano Vice, Principal of Bristol Eastern High School. The 2024-2025 High School Program of Studies was reviewed by the Student Achievement Committee on January 17<sup>th</sup> and it was moved forward for the full Board for your approval. The Program of Studies for the upcoming year includes new course offerings, pathways for students to pursue, and four-year academic planning tools and resources for students and families all of which have been updated in English and Spanish in a digital platform for increased accessibility. These features and more were shared with the Student Achievement Committee and once approved, will be available on the websites of Bristol Eastern, Bristol Central, and Bristol Preparatory Academy. Thank you to the high school teams who worked on updating this document this year. Commissioners were shown the live document on Bristol Eastern's website.

### **11.7. Program of Studies – cont'd**

On a motion by Kristen Giantonio, seconded by Russell Anderson;

*The Board of Education unanimously voted to approve the Program of Studies as written. With seven (7) Commissioners, Anderson, Carlson, Fitzsimons-Bula, Giantonio, Osenkowski, Van Gorder, and Pons in favor of the motion.*

### **12. POLICY REVISION**

Dr. Dietter presented the updates to Policy 5111 – Admission/Age of Attendance and Policy 5112 - Ages of Attendance. Both policies were reviewed at the January Policy Committee meeting and forwarded for your consideration this evening.

#### **12.1 Policy 5111 - Admission/Age of Attendance**

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

*The Board of Education unanimously voted to approve the Policy Revision of Policy 5111 as written. With seven (7) Commissioners, Anderson, Carlson, Fitzsimons-Bula, Giantonio, Osenkowski, Van Gorder, and Pons in favor of the motion.*

#### **12.2 Policy 5112 - Ages of Attendance**

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

*The Board of Education unanimously voted to approve the Policy Revision of Policy 5112 as written. With seven (7) Commissioners, Anderson, Carlson, Fitzsimons-Bula, Giantonio, Osenkowski, Van Gorder, and Pons in favor of the motion.*

### **13. NEW BUSINESS**

There was no New Business to come before the Board.

### **14. BUILDING/FACILITY REPORTS**

Peter Fusco, Facilities Director provided the monthly building reports:

**Chippens Underground Storage Tank** - True Blue has provided submittals and the tanks have been ordered; Installation will begin in early spring.

**BAIMS** - We canceled the January building committee meeting at BAIMS due to the water infiltration in the lower level; Conducted two walkthroughs with the insurance carrier and are awaiting approval to proceed with remediation and restoration; Review of the change orders for redundant heat and air curtain have been put on hold until remediation is complete.

**NEMS Building Committee Report** - The increase to the estimate will be reviewed at the city joint board meeting on February 13, 2024; Clough Harbour is the 3rd party estimator that will review D'Amato Downes CD estimate; The CD estimate will be reviewed with the committee at this month's meeting; The special permit was approved at the zoning commission meeting in January while the site plan was tabled until the February meeting. (February 12, 2024) and a meeting to review the interior finishes is scheduled this month.

**ESSER/ARP** - 100% CD's will be received by the end of this week; Met with the Purchasing Agent, and these will be out to bid by late next week; SNE has begun the BMS upgrades districtwide and continue to work through design and installation.

**EDGEWOOD RENOVATION/CULINARY ARTS PROJECTS** - In January, the project was approved by the Education Committee and they submitted that Priority List to the Governor and General Assembly on February 1st.; Next steps: In late Spring/Early Summer, the General Assembly authorizes the Commissioner of DAS to enter into grant commitments on behalf of the State.

**ATHLETIC FIELDS & SITE IMPROVEMENTS** - Received the report from the engineers - they have highlighted short-term repairs as well as long-term.

#### **15. INFORMATION/LIAISON REPORTS**

Commissioner Osenkowski shared an update on Ivy Drive. She reported on one of the Ivy Drive Dragons being recruited to the Kid Cabinet for Governor Lamont's team. She also mentioned there was an Enrichment Activity Arts Dinner that several of the Ivy Drive families attended to celebrate young artists.

#### **16. EXECUTIVE SESSION**

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

***The Board of Education unanimously voted to Convene Into Executive Session (8:18 p.m.) for:***

1. Discussion concerning Attorney/client communication related to a request for an exit interview (Proposed for Executive Session).
2. Superintendent's Evaluation - Mid Year - 23-24

#### **17. VOTOE TO RECONVENE INTO PUBLIC COMMENT TO VOTE ON ANY MATTERS FROM EXECUTIVE SESSION.**

#### **18. ADJOURNMENT**

There being no other business to come before the Board, the meeting should be adjourned.

Respectfully Submitted,  
*Michelle Crowley*  
Michelle Crowley, Recording Secretary  
Bristol Board of Education

# Emily Belanger

## EXPERIENCE

### **Bristol Blues Baseball, Bristol, CT — Concession Stand Worker**

June 2015 - August 2019  
12 hrs/week

### **Georges Pizza, Unionville, CT — Takeout Worker**

January 2018- August 2021  
10-12 hrs/week

### **Sparetime Entertainment , Bristol, CT — Birthday Party Host/ Snack Bar Worker**

November 2018 - March 2020  
10-12 hrs/ week

### **Shoprite Grocery Store, Bristol, CT — Shoprite From Home (Personal Shopper for Online Orders), Customer Service Associate/Bookkeeper**

May 2020- March 2022  
25-27 hours/ week

### **University of Saint Joseph Admissions, West Hartford, CT — Student Financial Service Worker/Admissions Ambassador**

August 2019- May 2021  
6-8 hrs/ week

## Leadership

Student Council Treasurer,  
September 2017- June 2018

Student Council President,  
August 2018- June 2019

Saxophone Section Leader In  
Band, September 2018- June  
2019

High School Baseball Team  
Statistician, April-June 2019

Selected to Lead the School of  
Education at Investiture,  
October 2022

## AWARDS

Entry into National Honors  
Society , March 2018

Entry into Spanish National  
Honors Society , June 2018

Investiture, October 2022

## LANGUAGES

3 years of Spanish Language  
at Bristol Eastern High School

## Skills

Personal Shopper

Customer Service Skills

**The Gengras Center, West Hartford, CT—Clinical Experience/  
Special Education Teacher Assistant**

January 2022- May 2022

2 hrs/ week (25 Hours total over the semester)

Leadership Role

Able to work under high  
amounts of pressure

Bookkeeping

Communication Skills

Social Skills

Data Entry Skills

Data Recording Skills

**ESS Employee- Paraprofessional Substitute, Bristol ,  
CT—Paraprofessional Substitute at Ivy Drive Elementary School**

August 2022- Current

21-23 hrs/week

**EDUCATION**

**Bristol Eastern High School, Bristol, CT— High School  
Diploma**

August 2015 - June 2019

GPA: 3.72

Graduation Date: June 14th, 2019

**University of Saint Joseph, West Hartford, CT — Degree in  
progress**

August 2019- Present

Anticipated Graduation Date: December 2023

Current GPA: 3.415

**Volunteer Service**

**American Red Cross Blood Drive Helper— Assisted in Student  
Council by helping run blood drives to save lives.**

Bristol

Eastern High School, Bristol, CT.

September 2016 - June 2019

**Daycare Helper in High School—Assisted in the daycare in my  
high school by helping watch the newborns and toddlers.**

Bristol Eastern High School, Bristol, CT.

November 2016 - January 2017

**Religious Education Teacher— Assisted a peer with teaching  
Religious Studies to a Third Grade Class**

Saint

Matthews School, Bristol, CT.

November

2017 - April 2018

**United Way Day of Caring— Visited Bristol Adult Resource  
Center and helped clean up outside, and helped assist the  
community.**

May 18th, 2018

# Jessica Silas

## PROFESSIONAL EXPERIENCE

### **Meriden Public Schools, Meriden, CT — Special Education Teacher**

August 2017 - PRESENT

- Manage a caseload
- Plan and supervise paraprofessionals
- Differentiate lessons for students based off current level and IEP goals
- Managing behavior and creating intervention plans
- Testing students
- Creating IEPs for studnets
- Communicating with parents and collaborating with general education teachers

### **Meriden Public Schools, Meriden, CT — 2nd Grade Teacher**

August 2016 - June 2017

- Prepare materials for lessons, assignments, and assessments.
- Collaborate with team

### **Southington Public Schools, Southington, CT — Building Substitute**

January 2016 - June 2016

## EDUCATION

### **University of Saint Joseph, West Hartford, CT — Masters in Literacy**

Graduated May 2020

### **Southern Connecticut State University, New Haven, CT — Bachelor of Science- Elementary/Special Education Bachelor of Arts: English/Behavioral Science**

Graduated December 2016

## SKILLS

- Google Drive Proficient
- CT-SEDS Platform
- Leadership Skills
- Communication Skills
- Critical Thinking
- Strong Organizational Skills
- Managing Skills
- Analyzing Data & Using it to Drive Instruction
- Behavior Intervention/Data Tracking
- Conflict Resolution
- Virtual Teaching Platforms

## LANGUAGES

- English



**2023-2024 School Closures and Delays  
(As of March 6, 2024)**

**CLOSED:**

Monday - 12/18/23

Tuesday - 1/10/24 (BP, BE, BC, BAIMS, CHMS and NEMS)

Tuesday - 1/16/24

Tuesday - 2/13/24

**DELAY:**

Monday - 1/8/24

Tuesday - 1/10/24 (ID, EDGE PK, MTC, STAF, SS, EPH, GH, WB)

Wednesday - 1/17/24

Wednesday - 1/24/24

Wednesday - 2/14/24

**EARLY RELEASE:**

Friday - 9/8/23



**2023-2024 School Closures and Delays  
(As of March 6, 2024)**

**CLOSED:**

Monday - 12/18/23

Tuesday - 1/10/24 (BP, BE, BC, BAIMS, CHMS and NEMS)

Tuesday - 1/16/24

Tuesday - 2/13/24

**DELAY:**

Monday - 1/8/24

Tuesday - 1/10/24 (ID, EDGE PK, MTC, STAF, SS, EPH, GH, WB)

Wednesday - 1/17/24

Wednesday - 1/24/24

Wednesday - 2/14/24

**EARLY RELEASE:**

Friday - 9/8/23

# 2023 - 2024 District Calendar



Teach and Learn with  
Passion and Purpose

AUGUST							1
S	M	T	W	T	F	S	
		1	2	3	4	5	
6	7	8	9	10	11	12	
13	14	15	16	17	18	19	
20	21	22	23	24	25	26	
27	TMD	PDD	PDD	31			

SEPTEMBER							19
S	M	T	W	T	F	S	
					1	2	
3	4	5	6	7	8	9	
10	11	12	13	14	15	16	
17	18	19	20	21	22	23	
24	25	26	27	28	29	30	

OCTOBER							21
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NOVEMBER							18
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DECEMBER							16
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JANUARY							20
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28	29	30	31				

EXPLANATION OF DATES		
Aug.	28	Teacher Meeting Day
Aug.	29 & 30	Teacher Professional Development Days
Aug.	31	First Day of School
Sept.	4	Labor Day - No School
Sept.	25	Yom Kippur
Oct.	9	Indigenous People Day/Columbus Day - No School
Nov.	7	Prof. Development Day/Election Day - No School
Nov.	10	Veterans Day - No School
Nov.	22	Thanksgiving Recess - Shortened Day All
Nov.	23 & 24	Thanksgiving Recess - No School
Dec.	22	Holiday Recess - Shortened Day All
Dec./Jan.	25 - 2	Holiday Recess - No School
Jan.	1	New Years Day Observance - No School
Jan.	15	Martin Luther King Jr. Day - No School
Feb.	19	Presidents' Day - No School
Feb.	20	Vacation Day - No School
Mar	29	Good Friday - No School
April	8-12	Spring Break - No School
May	27	Memorial Day - No School
June	12	Projected Last Day of School

Parent Conference Days: Shortened Days		
Elem:	Oct. 25, 26, and 27	PM conferences (Snow Date: Nov. 9)
	March 20, 21, 22	(Snow Date: April 4)
K-8:	Oct. 25, 26, and 27	PM conferences (Snow Date: Nov. 9)
	March 20, 21, 22	(Snow Date: April 4)
MS:	Oct. 24, 25, 26 and 27	PM Conferences (Snow Date: Nov. 9)
	March 20, 21	(Snow Date: April 4)
HS:	Oct. 10, 11, 12	(Snow Date: Nov. 9)
	March 7	(Snow Date: April 4)

Shortened Days Not Listed Above
Elementary, K-8 and Middle School - Last 3 days of school
High School - Midterms on the 88-91st school days;
Final Exams - Last five days of school

Emergency Days
Students must attend school 181 days. With no snow days the last day of school will be <b>June 12th</b> . Each snow day will advance the last day of school forward to no later than June 30.

FEBRUARY							19
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APRIL							17
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JUNE							8
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Total Days of School: 181
No School
Shortened Day - All

# 2023 - 2024 District Calendar



Teach and Learn  
with  
Passion and  
Purpose

AUGUST							1
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SEPTEMBER							19
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OCTOBER							21
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NOVEMBER							18
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JANUARY							20
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APRIL							16
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MAY							22
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JUNE							9
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23	24	25	26	27	28	29	
30							

Total Days of School: 181
No School
Shortened Day - All

Copy: Bd. of Education  
Real Estate Comm.  
Corp. Counsel

# Bristol Public Schools

WILLIAM F. ROWE, Ph.D.  
Superintendent of Schools



MR. DALE H. WENTZEL  
Assistant Superintendent - Instruction  
MR. WILLIAM E. WHITE  
Assistant Superintendent - Personnel  
MR. JOHN E. SMITH  
Assistant to Superintendent for Business

SEP 27 2 21 PM '84  
TOWN AND CITY CLERK

P.O. BOX 450  
BRISTOL, CONNECTICUT 06010-0450

September 25, 1984

CITY OF BRISTOL, CT  
CORPORATION COUNSEL  
RECEIVED

OCT 30 1984

AM 7, 8, 9, 10, 11, 12, 1, 2, 3, 4, 5, 6 PM

Interim Mayor Ralph G. Papazian and  
Members of the City Council  
c/o Rita D. Brown, Town and City Clerk  
City Hall, 111 North Main Street  
Bristol, Connecticut 06010

Dear Interim Mayor Papazian and Members of the City Council:

At its meeting held on September 12, 1984, the Board of Education voted to notify the City Council of its intent to release the West Woods School to the City Council as per the following vote:

"That the Board of Education release West Woods School to the City of Bristol contingent upon a recommendation from Central Office as to the number of classrooms that would be needed for educational purposes to be set aside in a wing with independent access."

When this needs assessment has been completed we would like to communicate with you and/or members of the West Woods School Conversion Committee further as to building management and other particulars as may be necessary.

Sincerely,

*William F. Rowe*

William F. Rowe, Ph.D.  
Superintendent of Schools

Presented at Council Meeting

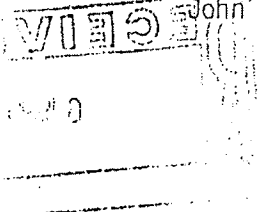
Oct. 9, 1984

Adopted FILE - Bd. of Education  
Ordered filed action  
Referred ~~xxx~~ matter of building  
management etc. to Real Estate  
Committee

R. B.

WFR:lsp

Copies to: Richard Guerriere, Chairman, Board of Education  
John E. Smith, Assistant to the Superintendent for Business



February 7, 1985

WestWoods School Conversion Committee

7/100  
MRS. K. L. ...  
The meeting was called to order at 7:45 P.M. In attendance were: Douglas Beals, Chairman, Nancy Moehl, Frank Lukasiewicz, Jeanne Bouyea and Winfield Johnston. John Pringle was present as a visitor.

The secretary's report was accepted as presented. There were no written communications.

Re: Unfinished business, Doug recapped the passage of control of the building from the Board of Education to the City. A letter from Dr. Rowe dated 9/25/84 stated that the Board of Education voted to release the building pending clarification from Central Office on the retention of the North Wing for school purposes.

At the Jan. 18, 1985 special meeting called by the Mayor, members of the WestWoods School Conversion Committee declared the need to use 5 rooms of the North Wing. It was agreed that Adult Education and the Bristol Teacher's Center would be accommodated by the Board of Education in that wing. The loss of 3 other needed rooms leaves the occupancy of the Red Cross still in doubt.

Mr. Beals outlined the qualifications of Quinn Associates who have been selected as the architects to do the feasibility study. He noted that a 1 million dollar figure was the projected, hoped for ceiling for the renovation. When the contract to Quinn has been approved by the City Council, a special meeting of this committee will be called.

John Pringle, present Director of the Bristol Senior Center, requested an opportunity to make a presentation to the WestWoods Committee before the Committee meets with the architects.

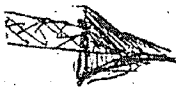
General discussion followed on various uses and scheduling challenges and possibilities at WestWoods.

Mr. Beals closed the meeting at 8:55 P.M. noting his appreciation for the good, hard and consistent work of the committee members. He expects an imminent conclusion to this committee's task.

Respectfully submitted,

*Nancy V. Moehl*

Nancy V. Moehl  
Secretary Pro Tem



Copy: Bd. of Education  
Real Estate Comm.  
Corp. Counsel

# Bristol Public Schools

WILLIAM F. ROWE, Ph.D.  
Superintendent of Schools

SEP 27 2 23 PM '84

TOWN AND CITY CLERK



P.O. BOX 450  
BRISTOL, CONNECTICUT 06010-0450

MR. DALE H. WENTZEL  
Assistant Superintendent - Instruction  
MR. WILLIAM E. WHITE  
Assistant Superintendent - Personnel  
MR. JOHN E. SMITH  
Assistant to Superintendent for Business

September 25, 1984

CITY OF BRISTOL, CT  
CORPORATION COUNSEL  
RECEIVED

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*William F. Rowe*

William F. Rowe, Ph.D.  
Superintendent of Schools

Presented at Council Meeting

Oct. 9, 1984

~~Adopted~~ FILE - Bd. of Education action  
~~Ordered filed~~  
~~Referred to~~ matter of building management etc. to Real Estate Committee

R. B.

WFR:lsp

Copies to: Richard Guerriere, Chairman, Board of Education  
John E. Smith, Assistant to the Superintendent for Business

February 7, 1985

WestWoods School Conversion Committee

MRS. Kleinschmidt  
7700  
MRS. Kleinschmidt  
A. F. Cooper  
Records

The meeting was called to order at 7:45 P.M. In attendance were: Douglas Beals, Chairman, Nancy Moehl, Frank Lukasiewicz, Jeanne Bouyea and Winfield Johnston. John Pringle was present as a visitor.

The secretary's report was accepted as presented. There were no written communications.

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Respectfully submitted,

*Nancy V. Moehl*

Nancy V. Moehl  
Secretary Pro Tem



6026



City of Bristol  
Office of Town and City Clerk  
111 North Main Street  
Bristol, Connecticut 06010  
(860)584-6200 ext. 0

April 9, 2014

Attorney Edward Krawiecki, Jr.  
Corporation Counsel  
City Hall  
111 North Main Street  
Bristol, Connecticut 06010

Dear Atty. Krawiecki:

At a meeting of the City Council on April 8, 2014 it was voted that the City accept the return of rooms 20, 19, 18, 17 and half of 16, located in the north wing at the former Westwoods School, now known as the Beals Senior Center, from the Board of Education. It was also voted that this matter be referred to the Department of Public Works and Building Committee for review and to the Department of Aging for informational purposes. It was further voted that this matter be referred to the Corporation Counsel's Office to prepare and/or review any necessary documents and to authorize the Mayor or Acting Mayor to execute any necessary documents to effectuate the same.

Very truly yours,

A handwritten signature in cursive script, appearing to read "Therese Pac".

Therese Pac, MCTC, MMC  
Town and City Clerk

TP/dml

BRISTOL CITY COUNCIL MEETING

APRIL 8, 2014

COUNCILMAN ERIC CARLSON, CHAIR  
REAL ESTATE COMMITTEE

MOTION

I hereby MOVE that the City accept the return of rooms 20, 19, 18, 17 and half of 16, located in the north wing at the former Westwood's School, now known as the Beal's Senior Center, from the Board of Education.

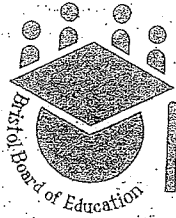
I further MOVE that this matter be referred to the Department of Public Works.

I further MOVE that this matter be referred to the Corporation Counsel to prepare and/or review any necessary documents.

I further MOVE that the Mayor, or acting Mayor, be authorized to execute any necessary documents to effectuate the same.

Ellen W. Solek, Ed.D.  
Superintendent of Schools

Susan Kalt Moreau, Ph.D.  
Deputy Superintendent of Schools



BRISTOL BOARD OF EDUCATION

P.O. Box 450 • 129 Church St.  
BRISTOL, CT 06011-0450  
(860) 584-7000 • Fax (860) 584-7611

February 20, 2014

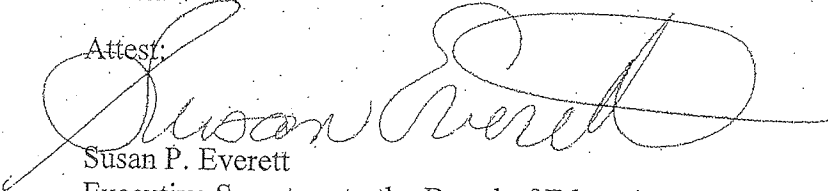
Therese Pac  
Town and City Clerk  
Bristol City Hall  
111 North Main Street  
Bristol, CT 06010

Dear Ms. Pac:

At a meeting of the Bristol Board of Education held on Wednesday, February 12, 2014 a motion was made by Commissioner Vibert, seconded by Commissioner Fitzgerald and unanimously

***VOTED: That the Board of Education agrees to return rooms 20, 19, 18, 17 and half of 16, of the north wing at the former Westwoods School, now known as the Beals Senior Center, to the City.***

Attest:

  
Susan P. Everett

Executive Secretary to the Board of Education

pc: Kenneth Cockayne, Mayor, City of Bristol

MARCH 11, 2014

**10. RECOMMENDATION FROM BOARD OF EDUCATION TO RETURN ROOMS 17 THROUGH 20 AND HALF OF 16 IN NORTH WING OF BEALS SENIOR COMMUNITY CENTER TO CITY OF BRISTOL, PLACED ON FILE.**

Communication from the Board of Education regarding the return of rooms in the Beals Senior Community Center to the City of Bristol.

As part of the Consent Calendar adoption and on motion of Council Member Carlson and seconded, it was unanimously voted: To place on file the recommendation that the Board of Education agrees to return rooms 17 through 20 and half of 16 in the north wing of the Beals Senior Community Center formerly Westwoods School to the City of Bristol.

**11. ACCEPTANCE OF BRISTOL STORM WATER CONTROL TRUST ANNUAL REPORT FOR CALENDAR YEAR 2013.**

Communication received from the Chairman of the Bristol Storm Water Control Trust regarding their 2013 Annual Report.

As part of the Consent Calendar adoption and on motion of Council Member Carlson and seconded, it was unanimously voted: To accept the 2013 Bristol Storm Water Control Trust Annual Report.

**12. AMENDMENTS TO BRISTOL CODE OF ORDINANCES SEC. 5-19(f), PERMIT FEES, ADOPTED.**

Recommendation presented from the Ordinance Committee regarding Bristol Code of Ordinances Sec. 5-19(f), Permit fees.

As part of the Consent Calendar adoption and on motion of Council Member Carlson, and seconded, it was unanimously voted: To amend and adopt the Bristol Code of Ordinances Sec. 5-19(f), Permit fees. It will be effective upon the expiration of fourteen days of its newspaper publication, and reads as follows –

Underscored text is proposed to be added. [Bracketed] text is proposed for deletion.

Sec. 5-19. Fees.

(f) *Fees for new construction.* The fee for a building permit for all new construction excluding all subcontracts such as plumbing, heating, electrical, etc. on residential building, shall be at the rate of forty cents (\$0.40) per square foot of area. On commercial or industrial building, said fee shall be at the rate of fifty cents (\$0.50) per square foot of area. Area will be computed by taking the ground floor times the number of stories. The fee for accessory buildings, garages, open

APRIL 8, 2014

**7. BOARD OF EDUCATION TO RETURN ROOMS 20, 19, 18, 17 AND HALF OF 16 IN NORTH WING OF BEALS SENIOR COMMUNITY CENTER TO THE CITY.**

As recommended by the Real Estate Committee and on motion of Council Member Carlson, Chrm., and seconded, it was unanimously voted: That the City accept the return of rooms 20, 19, 18, 17 and half of 16, located in the north wing at the former Westwoods School, now known as the Beals Senior Center, from the Board of Education. It was also voted that this matter be referred to the Department of Public Works and Building Committee for review and to the Department of Aging for informational purposes. It was further voted that this matter be referred to the Corporation Counsel's Office to prepare and/or review any necessary documents and to authorize the Mayor or Acting Mayor to execute any necessary documents to effectuate the same.

**8. OFFER FROM STATE OF CONNECTICUT TO PURCHASE 61 CENTER STREET, DECLINED.**

As recommended by the Real Estate Committee and on motion of Council Member Carlson, Chrm., and seconded, it was unanimously voted: To decline the offer to purchase property located at 61 Center Street from the State of Connecticut pursuant to §3-14b(a) of the Connecticut General Statutes as provided in correspondence from the State of Connecticut Department of Transportation on March 17, 2014. It was further voted to refer this matter to the Corporation Counsel to prepare and/or review any necessary documents and to authorize the Mayor, or Acting Mayor, to execute any necessary documents to effectuate the same.

**9. BEIRNE WEALTH CONSULTING ADDED AS 457 PLAN PROVIDER FOR CITY EMPLOYEES.**

As recommended by the Salary Committee and on motion of Council Member Martin, Chrm., and seconded, it was unanimously voted: To approve the addition of Beirne Wealth Consulting as a 457 plan provider for city employees and to refer to Comptroller's Office for implementation.

**10. PROPOSED REVISIONS TO PERSONNEL POLICIES & PROCEDURES REGARDING TUITION REIMBURSEMENT PROGRAM, ACCEPTED.**

As recommended by the Salary Committee and on motion of Council Member Martin, Chrm., and seconded, it was unanimously voted: To accept proposed revisions to the Personnel Policies & Procedures regarding the tuition reimbursement program.

BRISTOL PUBLIC SCHOOLS  
Bristol, Connecticut

February 12, 2014

(Date)

Information

Decision

AGENDA REPORTING FORM

TOPIC: Return of Part of the North Wing of the former Westwoods School to the City

BACKGROUND: The Board of Education has retained total use of the north wing of the former Westwoods School since the school was returned to the City in 1987. A majority of district programming was moved from this wing due to budget constraints two years ago. Recently, staff from the City and school district met to determine whether space could be returned to the City as a means for moving Probate Court out of City Hall. The following motion specifies the rooms that the Board of Education will relinquish.

COST: \_\_\_\_\_ FUNDING SOURCE: \_\_\_\_\_

RECOMMENDATION:

Motion: The Board of Education agrees to return rooms 20, 19, 18, 17 and half of 16, of the north wing at the former Westwoods School, now known as the Beals Senior Center, to the City.

ATTACHMENTS:

Map of Westwoods north wing.

TOPIC PRESENTER: Susan Kalt Moreau, Ph.D.

CONTACT NUMBER: 860.584.7006

SUPERINTENDENT: Ellen Solek, Ed.D.  
Ellen Solek, Ed.D.

Bristol Board of Education, Bristol CT

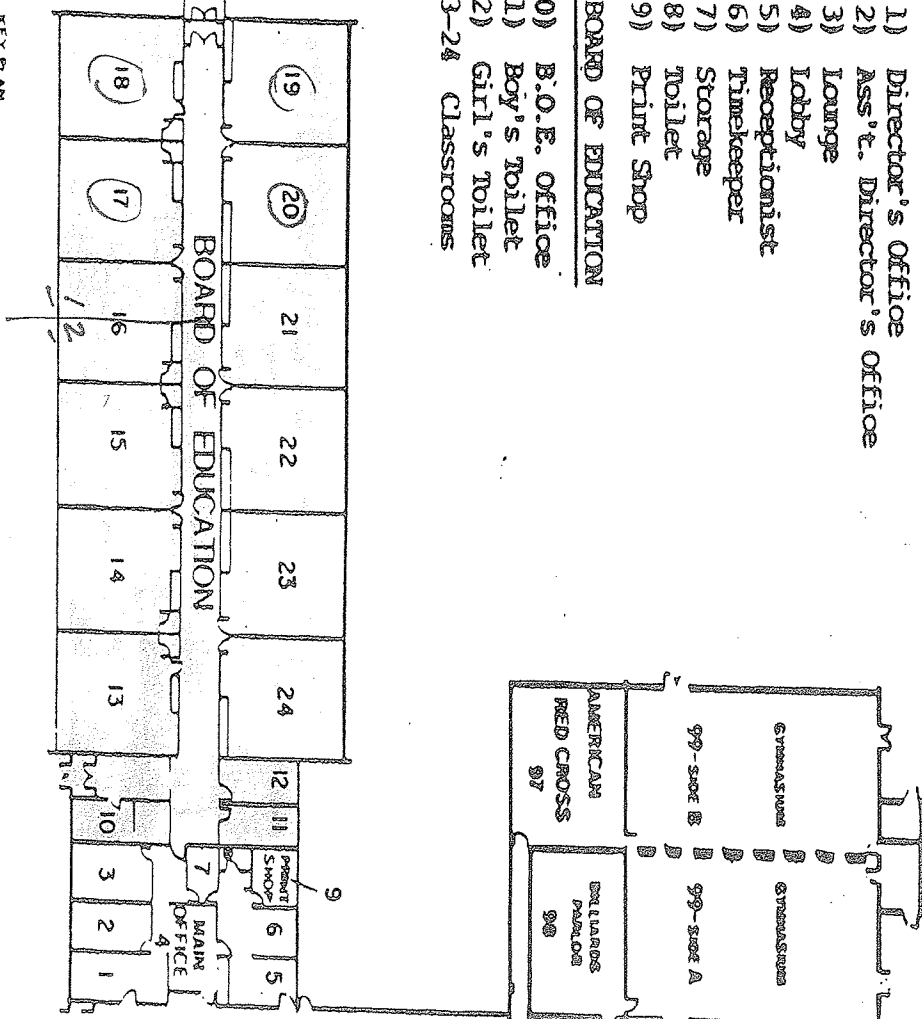
Presented at Board Meeting:	<u>2/12/14</u>
Approved:	<u>YES</u>
Order Filed:	<u>N/A</u>
Referred to:	<u>EWS/SPE</u>

SENIOR CENTER MAIN OFFICE

- 1) Director's Office
- 2) Ass't. Director's Office
- 3) Lounge
- 4) Lobby
- 5) Receptionist
- 6) Timekeeper
- 7) Storage
- 8) Toilet
- 9) Print Shop

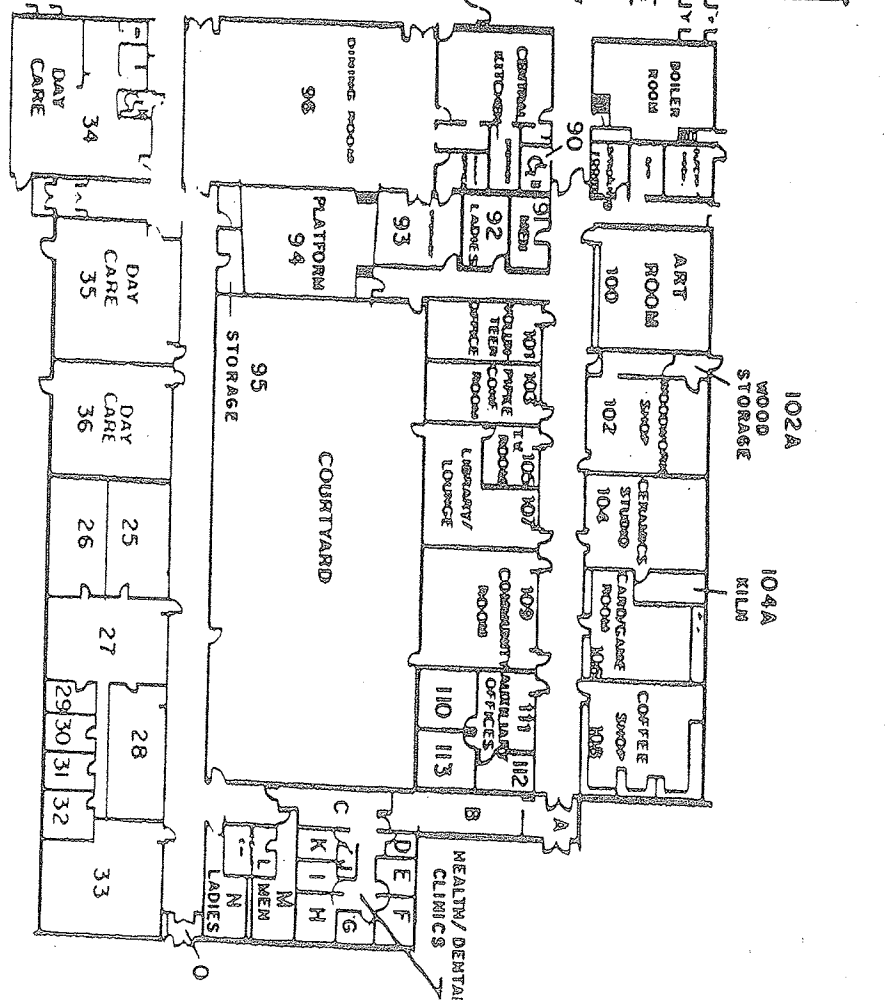
BOARD OF EDUCATION

- 10) B.O.E. Office
- 11) Boy's Toilet
- 12) Girl's Toilet
- 13-24 Classrooms



BRISTOL SENIOR/COMMUNITY CENTER

BRISTOL-BURLINGTON HEALTH DISTRICT



HEALTH-DENTAL CLINIC

- A) Vestibule
- B) Waiting Room
- C) Receptionist
- D) Toilet
- E-H) Exam Rooms
- I) Lab
- J) Darkroom
- K) Storage
- L) Mechanical Room
- M) Men
- N) Ladies
- O) Vestibule



- 25) Vault
  - 26) Sanitariums
  - 27) General Office
  - 28) Storage - Kitchen
  - 29) Doctor
  - 30) Director of Nurses
  - 31) Inspector
  - 32) Nurse Supervisor
  - 33) Nurses
- DAY CARE
- 34) Kindergarten
  - 35) General
  - 36) Games

# Increasing Educator Diversity Plan Template



**IMPORTANT NOTES:**

- 1. Formal approval by your local or regional board of education, or equivalent governing body for schools must be obtained prior to submitting your Increasing Educator Diversity Plan. Be prepared to provide the day, month and year that the plan was approved by the board or equivalent governing body as part of the upload of your submission.**
- 2. In the absence of an original motion or a preexisting board or board equivalent policy expressly conferring authority on the superintendent or equivalent schools administrator to make any necessary Plan revisions, the school board or equivalent governing body will be expected to formally approve any necessary revisions to its Plan prior to resubmitting the revised Plan by May 15, 2024**

COVER PAGE	
<b>District:</b>	Bristol Public Schools
<b>Vision:</b>	At BPS, we are committed to proactively recruit, retain, and value a teaching faculty that is as diverse and inclusive as our student body. We will cultivate an environment in which varied perspectives and backgrounds enrich the learning experiences and empower every student and teacher to thrive.
<b>Theory of Action</b>	If BPS identifies explicit actions which create the conditions, systems, and supports to recruit, retain and value candidates from underrepresented backgrounds, then we will increase our diversity among educators and enrich the learning experiences of the BPS community.
<b>Team Lead:</b>	Kimberly Culkin, Chief of Talent Management
<b>Team Members:</b>	Danielle Autencio, Tanya Bulls, Kim Culkin, Amy Devine, Michael Dietter, Mariliz Fitzpatrick, Molly Goodine, Michael Higgins, Michelle LeVasseur

# Increasing Educator Diversity Plan Template



RECRUITMENT								
Goal (What are we trying to do?)	Who Manages the (name, position)	Strategies/Key Activities			Indicators of (How will we know if we are on track for success?)	Resources Required (What people, time, money, and technology will be needed?)	Risks and (What could go wrong? How will we make that less likely to happen?)	Communication/ (Who needs to be consulted/ engaged? What needs to be communicated? To whom?)
		What?	Who Owns This?	By When?				
We will attract a diverse pool of educator applicants that is reflective of our student enrollment.	Kimberly Culkin, Chief of Talent Management	Our recruiting and advertising materials will highlight the strengths of BPS as an educational system including those that may be particularly pertinent to educators of color including BPS's commitment to equity, diversity, and inclusion	Office of Talent Management and Executive Director of Community Partnerships, and Strategic Planning	By April 1, 2024	A recruitment flyer will be developed and utilized for marketing, highlighting workplace attributes, values, and benefits	Time and research for compiling district attributes; access to graphic art design for development of flyer	Time and research for compiling district attributes; access to graphic art design and publishing for development of flyer and other printed recruitment materials	Office of Talent Management communication with staff to identify attributes that are meaningful and beneficial; communication between Office of Talent Management and Executive Director of Communications, Community Partnerships, and Strategic Planning to design and develop recruitment materials
We will attract a diverse pool of educator applicants that is reflective of our student enrollment.	Kimberly Culkin, Chief of Talent Management	Our recruitment and related advertising strategies will reach potential candidates beyond current and traditional platforms and venues to actively seek educators of color and diverse backgrounds.	Office of Talent Management	By May 15, 2024	Advertising will be presented in at least 3 additional social media sites. Measured Social Media impressions	Use of platforms including Twitter/X and LinkedIn; ESS as a recruiting partner	Staying updated with social media posts and colleges (also making sure the posts are closed when positions have been filled). Information regarding CSDE Certification requirements may need to be available to candidates; Recruitment platforms may not successfully target a diverse candidate pool-will need to assess candidate "traffic" on social media platforms	Office of Talent Management communication with staff to identify attributes that are meaningful and beneficial; communication between Office of Talent Management and Executive Director of Communications, Community Partnerships, and Strategic Planning to design and develop recruitment materials
We will attract a diverse pool of educator applicants that is reflective of our student enrollment.	Kimberly Culkin, Chief of Talent Management	In addition to our traditional (college campuses, etc.) recruiting grounds we will market and recruit at historically black colleges and nontraditional (work force, military) settings to network with a broad range of diverse backgrounds.	Office of Talent Management	On-going. By July 1, 2024 we will have increased our recruitment sites by 6 locations.	We will create a list of Historically Black Colleges as well as diverse community organizations in the Bristol and the larger New England area. We will connect with 3 HBCs and 3 community based settings to develop a recruitment plan/arrangement. We will aim to attend career fairs, we will update our recruitment materials and disseminate updated materials to identified contacts. By July 1, 2024 we will have increased our recruitment sites by 6 locations.	List of community and HBC sites; list of alumni schools of BPS employed teachers; contact information for site representatives, updated recruitment materials, funding for travel (if in person), funding for reciprocity of CSDE endorsement from out of state candidates, time/scheduling, follow up with candidates after events	Recruiting candidates who will require reciprocity for CSDE endorsement which will take time and funds (\$50 for enhanced reciprocity states)	Communication with new recruitment locations; teachers/staff are provided with the necessary support and professional development in support of recruitment

# Increasing Educator Diversity Plan Template



## HIRING & SELECTION

Goal (What are we trying to)	Who Manages the (name, position)	Strategies/Key Activities			Indicators of (How will we know if)	Resources Required (What people, time,	Risks and (What could go wrong?)	Communication/ (Who needs to be
		What?	Who Owns This?	By When?				
Applicants for all positions will reflect the demographics of the school and district will move forward through the hiring and selection process at a significantly higher rate than currently moving forward.	Kimberly Culkin, Chief of Talent Management	Hiring procedures will be updated to ensure: hiring committees' memberships reflect the diversity of the talent we seek in candidate pools; the process for screening applications will be revised to seek diverse backgrounds and experiences among candidates and will include hiring committee members; decision making process for moving candidates from screening to interview- to demo lesson-and so on will be tightly aligned with the BPS equity statement and beliefs; procedure for articulating justification for not moving candidates forward in hiring process; decision making process will explicitly include guidance for consideration of the positive impact and influence diversity has on teaching experience and students' learning experiences.	Building Admin and Office of Talent Management- Planning committee to meet quarterly to review action steps and indicators of progress	By May 1, 2024	Number of candidates of color and of diverse experiences moving through the hiring process will increase and will be measured by the number of teacher candidates of color recommended for interview and subsequently recommended for hire	Revised process for committee member selection; training for committee members for application screening; screening guide; access to application packets for committee member review and screening; review of rate by which candidates move through the process as compiled through reporting by Office of Talent Management (to include total number of applicants, total number of applicants who identified as race other than white or two or more races, number of candidates of color/two or more races invited to interview, number of candidates of color who moved forward to demonstration lesson and ultimately recommendation to hire.)	Time dedicated by interview committee members beyond the interview sessions required to screen applications before conveying interviews; discomfort that may arise for committee members when determining candidates to move forward or not to move forward; and tools/norms needed to effectively and respectfully challenge the input among committee members	Communication between OTM and hiring managers for review of statistics; communication of process for applicant screening to be between OTM and hiring managers
Diverse educators will be hired as reflective of enrolled students' racial demographics.	Kimberly Culkin, Chief of Talent Management	Provide continued training to hiring committees regarding recognizing and mitigating unconscious biases that might arise on a BPS recruitment committee and during hiring procedures; and monitor that each person on hiring committee has received such trainings	Office of Talent Department and Building Leaders	By May 1, BPS tailored training and monitoring systems will be in place	Percentage of candidates of color moving through the hiring process to recommendation for hire will increase by at least 50% from baseline	Training materials; monitoring of training built into the recommendation for hiring packets; revised process for committee member selection; training for committee members for application screening; screening guide; review of rate by which candidates move through the process-reports of candidates by race to be reviewed by district and building hiring managers to determine effectiveness of practices	Time needed for developing, adhering to, and reflecting upon revised practices and outcomes.	Communication between OTM and hiring managers regarding the hiring procedures and monitoring for completion of unconscious bias trainings for all committee members

# Increasing Educator Diversity Plan Template

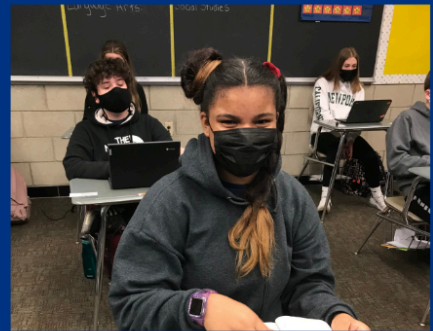
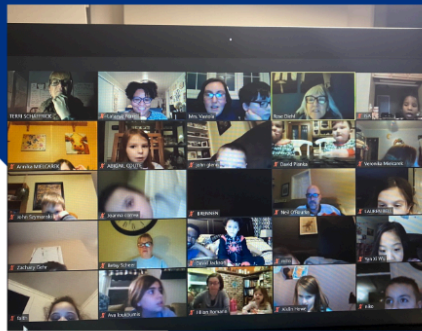


RETENTION								
Goal (What are we trying to)	Who Manages the (name, position)	Strategies/Key Activities			Indicators of (How will we know if)	Resources Required (What people, time,	Risks and Mitigation (What could go wrong?)	Communication/ (Who needs to be
		What?	Who Owns This?	By When?				
BPS-certified teaching staff will reflect the racial demographics of our students.	Kimberly Culkin, Chief of Talent Management	Explore providing benefits incentives (i.e., tuition reimbursement or program fees, increase starting step on the salary scale, pay for participation in certification programs while serving in non-certified positions)	Office of Talent Management and Superintendent/Central Office	By implementation of FY25 budget	Increase enrollment of BPS staff who are future educators of color attending teacher preparation programs.	Access to preparation programs for teachers of color structured so that participants can be employed as non-certified, full-time staff while preparing for certification; funding for salaries; tuition reimbursement, program fees, etc.)	Financial resources; contractual obligations if salary schedule is impacted	Communication between OTM and Superintendent's office regarding approval for funding; communication between OTM and State of CT preparation programs (i.e., CREC TRP); advertisement to communities of color regarding the opportunities for the professional growth and credentialing
BPS-certified teaching staff will reflect the racial demographics of our students.	Kimberly Culkin, Chief of Talent Management	Offer educator benefits that support the needs and experiences of teachers of color such as developing an affinity mentoring program; developing affinity groups; promoting teacher collaboration among teachers of color; build in racial bias awareness in diverse teaching collaboratives (i.e., common planning, huddles, departments)	Office of Talent Management and Building Leaders	Affinity Groups scheduled by April 1, 2024; Affinity mentors by July 1, 2024; Collaboration among teachers of color by September 1, 2024; Unconscious bias training for teacher collaboratives by September 1, 2024	Schedule is developed and implemented. Affinity groups will have been developed and schedule created. There are specific practices designed and implemented as part of educator collaboration regarding unconscious racial bias. There are specific times afforded for collaboration of teachers of color.	Affinity group facilitators; Affinity mentors; time scheduled for collaboration; time and training materials identified for racial bias awareness for teacher collaborative groups	Time identified for affinity mentors to meet; time identified for collaboratives to engage in unconscious bias training; training provided and identifying trainers (in district or from out of district)	Communicate programs of affinity groups and mentors to solicit interest and identify participants; identify the materials for teacher collaboratives to use for unconscious bias training for small professional groups
We will retain a diverse educator staffing	Kimberly Culkin, Chief of Talent Management	Interview current staff regarding their experiences and seek feedback from newly hired educators (i.e., regarding onboarding, acclimating in their new position, understanding why they chose BPS, understanding why they choose to remain in BPS ('stay interviews')). Identify barriers to retention. Identify elements that support retention.	Office of Talent Management	Interviews of new hires will be scheduled within 90 days from start date. By April 30, 2024, all educators hired in 2023-24 will be invited to and scheduled for such interview. A standard operating procedure to ensure internal systems of operation are in place for coordinating such interviews following hire will be developed by April 15, 2024.	Staff earn tenure at BPS and continue with BPS afterwards for additional 5 year minimum  80% of staff will complete feedback survey on commitments. 80% of all newly hired staff will have participated in interview. The Standard Operating Procedure will be finalized and included in the Office of Talent Management manual.	Creation of the standard operating procedures for coordinating interviews; creation of the interview protocol, creating of survey	Scheduling challenges and conflicts for teaching staff. Will arrange interview times with input from the participating teacher and with scheduling assistance from the building administrator.	All newly hired staff will be informed at time of hire that they will receive an invitation for interview within 90 days from start date. Principals and hiring committee will be informed of the revised hiring operating process. All current employees will be informed of invitation for interview.

# Bristol Public Schools

*Move Forward Together, Be Better Together*

## Innovate & Elevate Continuation Plan - Fall 2021



**BRISTOL PUBLIC SCHOOLS**  
TEACH & LEARN WITH PASSION & PURPOSE



## Board of Education Commissioners

Chair:	Jennifer Dube
Vice-Chair:	Kristen Giantonio
Secretary:	Dante Tagariello
	Todd Sturgeon
	Jill Fitzsimmons-Bula
	Maria Simmons
Board Liaison:	Erick Rosengren

## Central Office Leadership

Superintendent of Schools:	Catherine M. Carbone, Ed.D.
Deputy Superintendent of Schools:	Michael Dietter, Ed.D.
Director of Finance and Operations:	Lynn Boisvert
Director of Special Services:	Amy Martino
Director of Teaching and Learning:	Carly Fortin



Director of Talent Management:

Kimberly Culkin, Ed.D

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**Current Guidance from DPH and CSDE supersedes any information codified in this document.**

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### Bristol Public Schools Reopening Goal

Upon the resumption of in-person learning for the start of the 2021-2022 school year, our students and staff will learn and thrive in **safe and supportive school and classroom environments**. Our students will learn through **high-quality, equity-centric instruction** delivered by skilled educators who **hold high expectations** for their learning, following our Vision of the Graduate and BPS curricula.

Revised: **March, 2024** ~~May, 2023~~ ~~December, 2022~~ ~~June, 2022~~ ~~January, 2022~~ ~~December, 2021~~  
~~August, 2021~~ ~~June, 2021~~

**Current Guidance from DPH and CSDE supersedes any information codified in this document.**

## Core Planning Team Members **(Current/change of position)**

Name	Title	Org	Email	Phone
Catherine Carbone	Superintendent	BPS	<a href="mailto:catherinecarbone@bristolct.gov">catherinecarbone@bristolct.gov</a>	(860) 378-5144
Michael Dietter	Deputy Superintendent	BPS	<a href="mailto:michaeldietter@bristolct.gov">michaeldietter@bristolct.gov</a>	(860) 329-6286 (860) 937-4193
<del>Allison Wadowski</del>	<del>BOE Commissioner</del>	BPS	<del><a href="mailto:allisonwadowski@bristolct.gov">allisonwadowski@bristolct.gov</a></del>	
Lynn Boisvert	Director of Finance & Operations	BPS	<a href="mailto:lynnboisvert@bristolct.gov">lynnboisvert@bristolct.gov</a>	(860) 385-3714
<b>Dan Mainiero</b>	Director of Security	BPS	<a href="mailto:danmainiero@bristolct.gov">danmainiero@bristolct.gov</a>	(860) 329-2286
<b>Amy Martino</b>	Director of Special Services	BPS	<a href="mailto:amymartino@bristolct.gov">amymartino@bristolct.gov</a>	(860) 302-1665
Carly Fortin	Director of Teaching and Learning	BPS	<a href="mailto:carlyfortin@bristolct.gov">carlyfortin@bristolct.gov</a>	(860) 378-5395
<b>Kimberly Culkin</b>	Director of Talent Management	BPS	<a href="mailto:kimberlyculkin@bristolct.gov">kimberlyculkin@bristolct.gov</a>	(860) 620-7256
Brian Burke	Executive Director of Communications, Community Partnerships, and Strategic Planning	BPS	<a href="mailto:brianburke@bristolct.gov">brianburke@bristolct.gov</a>	(860) 584-7035
<b>Cera Orner</b>	Supervisor of PE, Health, Athletics	BPS	<a href="mailto:ceraorner@bristolct.gov">ceraorner@bristolct.gov</a>	(860) 329-9298
<b>Michelle Crowley</b>	Asst. to the Deputy Superintendent	BPS	<a href="mailto:michellecrowley@bristolct.gov">michellecrowley@bristolct.gov</a>	(860) 406-1083
Susan Everett	Asst. to the Superintendent	BPS	<a href="mailto:susaneverett@bristolct.gov">susaneverett@bristolct.gov</a>	(860) 378-5284
<b>Collin Urayse</b>	Director, Student Transportation	BPS	<a href="mailto:collinurayse@bristolct.gov">collinurayse@bristolct.gov</a>	(860) 329-9306
David Foulds	Director of Food Svc	BPS	<a href="mailto:davidfoulds@bristolct.gov">davidfoulds@bristolct.gov</a>	(860) 877-8318
Peter Fusco	Director of Facilities	BPS	<a href="mailto:peterfusco@bristolct.gov">peterfusco@bristolct.gov</a>	(860) 302-0824
Elizabeth McGuire	School Health Service Coordinator	BBHD	<a href="mailto:lizmccuire@bristolct.gov">lizmccuire@bristolct.gov</a>	(860) 584-7629
Marco Palmeri	Director of Health	BBHD	<a href="mailto:marcopalmeri@bristolct.gov">marcopalmeri@bristolct.gov</a>	(860) 584-7682

## Core Planning Team Members (Cont'd)

Michael Reynolds	Teacher/BFT	CHMS	<a href="mailto:mikereynolds@bristolk12.org">mikereynolds@bristolk12.org</a>	(860) 205-7956
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## District and School Liaisons, Communications Plans, and Data Collection

### District Liaisons

The Bristol Public Schools COVID-19 Health and Safety Compliance Liaisons, are Deputy Superintendent, Michael Dietter, Ed.D. and Director of Talent Management, Samuel Galloway, Ed.D. The BPS COVID-19 Health and Safety Compliance Liaisons are responsible for engaging with students, parents, faculty, staff, and administrators to answer questions or concerns about health and safety requirements regarding COVID-19. At the school level, the school nurse and the building principal will serve as the school level compliance liaisons.

### Covid-19 Health and Safety Compliance Liaisons

Dr. Michael Dietter  
Superintendent  
[michaeldietter@bristolk12.org](mailto:michaeldietter@bristolk12.org)  
860.584.7006

**Dr. Kimberly Culkin** Deputy  
Director of Talent Management  
[samuelgalloway@bristolk12.org](mailto:samuelgalloway@bristolk12.org)  
860.584.7022

### Covid-19 School Medical Advisor

Liz McGuire, BSN,RN  
School Health Service Coordinator  
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860.584.7682

Marco Palmeri, M.P.H., R.S.,  
Director of Health  
[marcopalmeri@bristolct.gov](mailto:marcopalmeri@bristolct.gov)  
860.584.7682

## School Liaisons

 <p><b>Bristol Central High School</b>            860.584.7735            Principal            Winger <a href="mailto:peterwinger@bristol12.org">peterwinger@bristol12.org</a>            Nurse Sue Ellen Repeta/            Cheryl Woodward</p>	 <p><b>Bristol Eastern High School</b>            860.584.7876            Principal            Higgins <a href="mailto:michaelhiggins@bristol12.org">michaelhiggins@bristol12.org</a>            Nurse Arlene Burns/Tracy Mitchell</p>
 <p><b>Bristol Preparatory Academy</b>            860.584.7865            Director            Mr. Covino <a href="mailto:lawrencecovino@bristol12.org">lawrencecovino@bristol12.org</a>            Nurse Elizabeth McGuire</p>	 <p><b>Chippens Hill Middle School</b>            860.584.3881            Principal            Fitzpatrick <a href="mailto:marilizfitzpatrick@bristol12.org">marilizfitzpatrick@bristol12.org</a>            Nurse Michelle Bellemare</p>
 <p><b>Northeast Middle School</b>            860.584.7839            Principal            Sonstrom <a href="mailto:danielsonstrom@bristol12.org">danielsonstrom@bristol12.org</a>            Nurse Lori Laurencelle</p>	 <p><b>Greene-Hills School</b>            860.584.7822            Principal            Gaudet <a href="mailto:scottgaudet@bristol12.org">scottgaudet@bristol12.org</a>            Nurse Marie Martone</p>
 <p><b>West Bristol School</b>            860.584.7815            Principal            LeVasseur <a href="mailto:michellelevasseau@bristol12.org">michellelevasseau@bristol12.org</a>            Nurse Debra Doyon</p>	 <p><b>Bristol Early Childhood Center</b>            860.584.3335            Supervisor            Ms. Peck <a href="mailto:kristenpeck@bristol12.org">kristenpeck@bristol12.org</a>            Nurse Marguerite Adamski</p>
 <p><b>Edgewood Elementary</b>            860.584.7828            Principal            Abraham <a href="mailto:kristinabraham@bristol12.org">kristinabraham@bristol12.org</a>            Nurse Mark Rouleau</p>	 <p><b>Hubbell Elementary</b>            860.584.7842            Principal            DeLeo <a href="mailto:kristinedeleo@bristol12.org">kristinedeleo@bristol12.org</a>            Nurse Lanelle Giosa</p>
 <p><b>Ivy Drive Elementary</b>            860.584.7844            Principal            Gomes <a href="mailto:emilygomes@bristol12.org">emilygomes@bristol12.org</a>            Nurse Erin Hamilton</p>	 <p><b>Mountain View Elementary</b>            860.584.7726            Principal            Hawk <a href="mailto:maryhawk@bristol12.org">maryhawk@bristol12.org</a>            Nurse Kristin Labrecque</p>
 <p><b>Stafford Elementary</b>            860.584.7824            Principal            Farrell <a href="mailto:latanyafarrell@bristol12.org">latanyafarrell@bristol12.org</a></p>	 <p><b>South Side Elementary</b>            860.584.7812            Principal            Huber <a href="mailto:davidhuber@bristol12.org">davidhuber@bristol12.org</a></p>

Nurse

Christie Ganavage

Nurse

Mary Tomasi

## Communications Plan

Bristol Public Schools and the Bristol BOE will base all decisions related to school level and district level operations, health and safety measures, school programming and transportation needs on current research and in concert with the recommendations of the CDC, CSDE, DPH, and BBHD. The health and safety of our students and staff is paramount. Any potential school closing will be determined in collaboration with local public health officials. While education is important, *the health and wellbeing of our students and staff are far more significant.*

The BPS Communications Plan is designed to provide accurate, timely and valuable information. To that end, parents and staff should expect to receive regular communication from the Office of Superintendent. In the case of an emergency or closure, a message will be sent to all stakeholders as soon as information is available and accurate. All BPS district letters and communications will be found on the [district website](#), the BPS website is updated as necessary and all communications are archived. Communications will be sent in English and Spanish via email, Powerschool messenger or ParentSquare and SMS texting. As a secondary means of communication, school and district websites and Twitter will be used. Webinars will be used when appropriate to ensure information is provided timely and thoroughly.

Communication related to BPS cleaning and sanitization practices are outlined throughout the reopening plan and will be shared on the BPS district website.

As a community, state, and country we must ensure we work as a team to mitigate and prevent the spread of COVID-19. Our collective efforts this past year show that we were able to keep our students and staff safe and healthy; these efforts must continue as we welcome the 2021-2022 school year. Our BPS commitment is to ensure all persons are safe and our scholars are taught in nurturing learning environments, this commitment remains as important today, as it was throughout the COVID-19 pandemic. As we make collective commitments to keep one another safe by following the guidelines found throughout this plan, we must also ensure our students, staff and families are sensitive to our community members from varying backgrounds and cultures. COVID-19 is not isolated to a particular country and does not discriminate - it is vital that we avoid stereotypical assumptions or discriminatory actions to anyone, anywhere, and at any time.

Revised: **March, 2024** ~~May, 2023~~ ~~December, 2022~~ ~~June, 2022~~ ~~January, 2022~~ ~~December, 2021~~  
~~August, 2021~~ ~~June, 2021~~

**Current Guidance from DPH and CSDE supersedes any information codified in this document.**

## HEALTH AND SAFETY

### Prevention Strategies

The best way to prevent illness is to avoid being exposed to COVID-19. COVID-19 is [spread mainly from person-to-person](#) as outlined below:

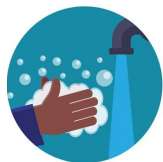
- Between people who are in close contact with one another for a prolonged period of time (15 minutes or longer, within about 6 feet).
- Through respiratory droplets produced when an infected person coughs, sneezes, or talks.
- Droplets can land in the mouths or noses of people who are nearby or possibly be inhaled into the lungs.
- People without symptoms may be able to spread COVID-19.
- Keeping distance from others is especially important for [people who are at higher risk of getting very sick](#).

It is critically important for all members of our school and district community to remain home. If you [are sick or not feeling well, stay at home](#).

### Strategies to Reduce the Spread of Infection

The following practices will be taught and reinforced in all schools and classrooms in BPS.

#### Hand Washing



Students and staff will be expected to [wash hands](#) often with soap and water for at least 20 seconds especially after being in a shared place, after blowing your nose, coughing, or sneezing.



If soap and water are not available, hand sanitizer that contains at least 60% alcohol will be provided. When using hand sanitizer, be sure to cover all surfaces of your hands (front and back) and rub them together until they feel dry.



Avoid touching your eyes, nose, mouth and face with unwashed hands.



Wash/sanitize your hands upon arrival to school, when leaving/transitioning from a classroom for any reason, and when prompted to do so by an adult.

Classroom cohorts, where applicable, will be assigned specific washing stations, and/or hand sanitizer dispensers.

## Coughing and Sneezing



Cover your mouth and nose with a tissue when you cough or sneeze or use the inside of your elbow.



Throw used tissues in the trash and immediately wash hands with soap and water for at least 20 seconds.



If soap and water are not available, use hand sanitizer containing at least 60% alcohol.

## Cleaning and Disinfection Efforts\*\*

BPS will ensure surfaces that are frequently touched will be cleaned throughout the day. This will include cleaning objects/surfaces door knobs, light switches, classroom sink handles, countertops, toys, and equipment, or any items/surfaces expressly identified as in need of cleaning. All cleaning products are approved for use in schools. Disinfection will occur in the following areas:



- Bathrooms
- Areas of known exposure
- Nurse/Health or COVID Isolation room

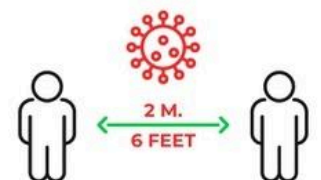
**\*\*Information has been updated in compliance with CDC and Connecticut Department of Public Health guidelines.**

## Social Distancing

Social distancing refers to the practice of keeping space between yourself and others to reduce the chance of contact with those who knowingly or unknowingly carry an illness. All persons, staff, and students will ensure, to the greatest extent possible, they remain a **minimum of 3 feet apart**, and when space allows, upwards of 6 feet apart from another person.



- Social distancing will be adhered to in hallways, travel into schools, and within classroom spaces.



- BPS will adjust the approach to social distancing if guidance from the CDC or DPH changes due to changing public health data or increased understanding of COVID-19 disease.
- Students with special health care needs or disabilities whose learning (e.g., direct instruction) or other needs (e.g., assisting with toileting or ambulation) may require closer proximity and/or direct contact will be screened daily by a BPS employee. This screening will rely, in part, on the employees' experience and knowledge of the student and their unique/personal affect. If for any reason our employee raises a concern, the BBHD nurse will be notified and an advanced screening will occur.
- To ensure social distancing is followed in district and school spaces, signs and floor markings will be installed to illustrate social/physical distancing.

## Classroom and Program Spaces

The linked document explains Classroom Layout Requirements - [link to classroom layout](#)

## Material Sharing

- **Single or designated use materials are no longer required.** Staff will plan in advance to determine if additional materials or supplies are necessary to support instruction. Materials include, but are not limited to books, computers, calculators, writing utensils, computer keyboards/headphones, and art supplies.
- BPS employees will clean materials regularly, consistent with [CDC guidelines](#) and procedures outlined further in this reopening plan.

## Use of Face Coverings, Masks, and Face Shields

- Beginning February 28, 2022, masks and face coverings are optional, with limited exceptions, for staff, students, and visitors, while indoors or on the grounds of BPS, unless otherwise directed by the DPH, CSDE, OEC.
- Anyone entering a school health room or health office must wear a mask or face covering.
- Anyone utilizing public conveyance including school buses or contracted transportation services must wear a mask or face covering.
- BPS will provide a mask to any student or staff member who requests one.
- Face coverings should be clean, secured via a loop or elastic, and provide coverage of the mouth and nose. Face coverings should comply with existing BOE dress guidelines (references to alcohol or tobacco products, offensive messages or images that may be disruptive to the educational process are prohibited). In the event a face covering is determined to be disruptive to the educational process, the student will be provided with a disposable mask and the parent/guardian will be notified of the concern.
- BPS will update/revise student, employee, and visitor use of face coverings as appropriate.



## Use of Face Coverings, Masks, and Face Shields



### Face Covering

A cloth, paper, or disposable face covering that covers the nose and mouth; may or may not be medical grade



### Face Shield

A clear plastic shield that covers the forehead, extends below the chin, and wraps around the sides of the face



### Clear Plastic Barrier

A clear plastic or solid surface that can be cleaned and sanitized often

### **BPS staff will:**

- Provide a mask or face covering to anyone that requests a mask or face covering.
- Remind students and others not to touch their face covering and to wash their hands frequently.
- Provide staff, students, and students' families information on proper use, removal, and washing of cloth face coverings.
- When and where applicable, a schedule of mask breaks will be developed by the building administration in collaboration with the classroom teacher and if necessary, BBHD nurse, or special education representative. Factors to consider include, but are not limited to:
  - Age of student
  - Development
  - Presence of a disability or other medical condition
  - Ambient temperature and activity level

Face shields are permitted. The decision to utilize face shield should take into account the following:

- Face shields protect the eyes, nose, and mouth from contamination from respiratory droplets, along with masks or respirators.
- Staff working with students who cannot maintain social distance, will be provided access to increased protective equipment, including face shields, masks, and disposable gowns.

## Standard Public Health Practices and Adequate Supplies

All staff, students and visitors to BPS will be educated and engaged in the expectations of all public health policies and protocols related to COVID - 19. As part of this requirement, BPS staff will assess the best approach to communicating the information for the age and developmental needs of

their students. BPS schools and programs will set aside time at the beginning of the school year and periodically throughout the 2021-2022 school year to ensure understanding and compliance of policies and protocols.

BPS staff will:

- Familiarize all stakeholders and students of the standard public health practices used to prevent the spread of diseases.
- Educate and train the school community in standard public health practices, to help them make appropriate decisions and comply with school health policies and practices. (The CDC has more detailed information on this topic. Related to schools as workplaces, the Occupational Safety and Health Administration (OSHA) has also provided important measures for control and prevention that should be communicated to the school community.)
- Provide frequent reminders to students and staff of the importance of these precautions.

BPS will provide adequate supplies, including soap, hand sanitizer with at least 60% ethyl alcohol or 70% isopropyl alcohol (for staff and older students who can safely use hand sanitizer), paper towels, tissues, disinfectant wipes, cloth face coverings, and no touch trash receptacle (no lid). Trash receptacles will be emptied when they are approaching  $\frac{2}{3}$  full. A covered waste receptacle for the disposal of feminine hygiene or related products is required.

## Student Screening

### Immunizations and Health Assessments

All families registering their child in the BPS must be up to date on required immunizations and health assessments. In the event your child's immunizations or health assessments have lapsed, please contact your healthcare provider or the BBHD at 860.584.3000.

**Immunizations:** [Guidance from the Department of Public Health](#) emphasizes the importance of protecting students by staying up to date on immunizations.

**Health Assessments:** Guidance regarding requirements for Health Assessments for student enrollment can be found [here](#).












### Vaccination

All BPS employees and students eligible for vaccination are encouraged to contact the [CT DPH](#), BBHD, or their local health provider for details and/or consultation regarding vaccines. Vaccination is the primary prevention strategy available to schools.

### Daily Screenings

Parents and guardians are strongly encouraged to [screen their children on a daily basis](#) for

the following COVID-19 symptoms:

 Fever above 100.4 or chills	 Cough	 Shortness of Breath or Difficulty Breathing	 Fatigue
 Muscle or Body Aches	 Headache	 New Loss of Taste or Smell	 Sore Throat
 Congestion or Runny Nose	 Nausea or Vomiting	 Diarrhea	












Parents and guardians should immediately notify the school nurse and their health care provider if they or their child display any of the above symptoms, become sick with COVID-19, test positive for COVID-19, or have been exposed to someone with COVID-19.

Students who feel sick or who have been exposed to a positive COVID-19 case, should stay at home and contact their health care provider and building administrator.

**Important Note:** Temperature screening for all is not recommended as it can be unreliable, inefficient, and does not address asymptomatic individuals.

## Staff Screening

All BPS employees are expected to self screen on a daily basis for the following COVID-19 symptoms:

 Fever above 100.4 or chills	 Cough	 Shortness of Breath or Difficulty Breathing	 Fatigue
 Muscle or Body Aches	 Headache	 New Loss of Taste or Smell	 Sore Throat
 Congestion or Runny Nose	 Nausea or Vomiting	 Diarrhea	

Employees should immediately notify the building administrator or school nurse if they are experiencing any of the above symptoms, become sick with COVID-19, test positive for COVID-19, or have been exposed to someone with COVID-19.

## Attendance Monitoring

In collaboration with the Bristol Burlington Health District, BPS will actively monitor staff and student absenteeism and track the reasons for their absences to identify any trends that would suggest spread of illness such as COVID-19.

BPS and BBHD staff will:

- Code all student and staff absences in PowerSchool (student) and Frontline Absence Management
- A BBHD employee will maintain a secured log in each building with symptom codes for fever or COVID-related symptoms of employees or students.
- Staff, students and families should immediately report all sickness directly to the school nurse. School nurses will assess self-report and engage in proper notification of BBHD and BPS administration.

The process to report illnesses and addressing vulnerable populations [can be found here](#). If a school or region must cancel classes, attendance during periods of blended learning will be collected utilizing BPS login/check-in.

## Containment Plan

The purpose of containment plans are to decrease the risks of spreading COVID-19. Components to the BPS containment plan include:

- Immediate coordination with the BBHD, including being ready to comply with requests for information from the local health department to assist with contact tracing.
- Activation of the school-based response team (a school-based team may consist of crisis team members) and the District Crisis and Emergency Preparedness Team. The District Response Team's specific responsibilities are outlined in the Emergency Operations Manual.
- Use of the BPS Symptomatic Response Plan which includes the signs and symptoms exhibited by students or staff that would require their immediate dismissal from school; determine the period of time for absence; and conditions for their re-admittance to school.
- Notification to the BBHD if any person who has been present in school has a confirmed diagnosis of COVID-19.
  - Upon conferring with BBHD, BPS will determine appropriate response along a continuum which may include:
    - Notification and alert via contact tracing. In classrooms in which seating charts are used, and student seating can be verified, contact tracing will become more localized. Only students identified within six feet for fifteen minutes or more of an individual who is confirmed positive for COVID-19 will be recommended for quarantine. Previously, the entire class was recommended for quarantine.
    - Selective temporary closure/quarantine
    - Expanded closure/quarantine
    - Students and employees that are fully vaccinated and asymptomatic will not be required to quarantine.
- Identification of an "isolation room" (besides the health office) to accommodate students who exhibit symptoms consistent with COVID-19 until a parent or guardian arrives. Students will remain supervised in the isolation room. For the purposes of contact tracing, a log of all persons who entered the room will be maintained. Individuals supervising the room will be equipped with proper PPE.

The dismissal process for students or staff who exhibit symptoms of COVID-19 and must be dismissed from school can be found here.

### BPS staff will:

- Educate the school community about the signs and symptoms of COVID-19: see more information on the CDC website.

- Provide resources to staff and families regarding local community testing, such as the contact information for BBHD 860.584.3000 and 211 of Connecticut.

## Visitors

It is the goal of Bristol Public Schools to provide a safe and secure environment for our students, staff, and visitors. BPS will follow guidelines and recommendations from the BBHD and CDC in allowing visitors who need access to our schools. Visitor guidelines are posted at the entrance of each building and main office and will include an explanation and visual (English & Spanish) of social distancing guidelines. Specific guidance for each building will be available at the entrance of each building. Visitor guidelines will be posted on each school's website. All visitors will be expected to wear masks, complete a pre-arrival self screening and follow all mitigation directives.

### Visitors are expected to:

- Use the designated entrance for **visitors** (appointments, maintenance, vendors, mentors\*);
- State their name and purpose for the visit;
- ~~Wear a face covering;~~
- The BPS standard visitor protocol will remain in use, all visitors will be vetted through the Raptor system and issued a badge;
- Health screenings at the entrance may be utilized and include the following:
  - Symptoms
  - Contact history

### Pick-up and Drop-off:

All BPS buildings and programs will establish a designated **pick-up and drop-off** location during school hours. Parents and Guardians are asked to follow building specific procedures for pick-up and drop-off including wearing a mask or face covering when entering the building.

## Reporting Illnesses and Addressing Vulnerable Populations

### Staying at Home

[If you are sick or believe that you might be sick, stay at home.](#)

The [Equal Employment Opportunity Commission \(EEOC\) has provided guidance](#) that confirms that, during a pandemic, it is permissible to ask employees if they are experiencing symptoms of the pandemic virus (fever, chills, cough, shortness of breath, or sore throat). Employers must maintain all information about employee or student illness as a confidential medical record.

- If any staff member reports they are sick or are caring for a sick family member, immediately notify the school nurse, isolate the staff person (if applicable), and await further instruction.
- The school nurse will receive and safeguard this information.

If a staff member or teacher is concerned about individual risk factors they should talk to their healthcare provider to assess their risk for working in an environment where social distancing might be difficult to maintain.

Staff and students (or their parents and guardians) are encouraged to perform a [self-assessment](#) prior to leaving for school to identify fever and other possible COVID-19 symptoms.

- [School-wide sick protocols \(BBHD\)](#), including signs and [symptoms of COVID-19](#), and temperature thresholds requiring students or staff to stay home include:
  - Fever above 100 or chills
  - Cough
  - Shortness of breath or difficulty breathing
  - Fatigue
  - Muscle or body aches
  - Headache
  - New loss of taste or smell
  - Sore throat
  - Congestion or runny nose
  - Nausea or vomiting
  - Diarrhea
- Use these checklists to assess your child - [CT211](#) or [CDC self-check](#).

### Returning to School

CDC and DPH authorize local public health authorities to determine and establish the quarantine options for their jurisdictions. BPS, in collaboration with BBHD, will follow the current and relevant public health guidelines and communicate with local public health officials regarding the return of a student or staff member. At present, CDC's criteria to help inform when employees should return to work includes:

- If they have been sick with COVID-19

- If they have recently had close contact with a person with COVID-19
- ~~[CDC isolation and quarantine guidelines](#)~~
- [March 2024 Updated Isolation Guidelines](#)

## Point of Service Operations

All locations identified as “point of service” will be equipped with or do the following;

- Visitors will be required to report through a designated entrance as standard school safety procedures remain critical.
- Appointments with staff should be pre-arranged. Virtual meeting appointments are available.
- [Signage](#) outlining health protocols will be posted at all doors, floor landings, and walls. Messages will be consistent throughout the district. Directional arrows will be used to denote traffic flow in each school and at the BOE.
- When possible, all people will maintain a 3-6 ft distance between each other.
- Hand hygiene supplies will be available and hand sanitizer will be at the entrance and exit doors.
- Plexiglass barriers will be utilized in Point of Service locations.
- In order to meet parent concerns or needs, a staff member may be assigned outside the school entrance to triage parent concerns or requests.
- Plexiglass barriers are located at food service serving stations and cashier stations.

## Signs and Messages Requirements

BPS will ensure all [signs and messages](#) are accessible for students with disabilities and in languages appropriate for the school population.

### BPS staff will:

- Focus on distribution of information and regular communication about the actions school communities can take to [stop the spread](#). This includes posting [signs](#) in highly visible locations (e.g., school entrances, staff areas, and restrooms) that [promote everyday protective measures](#), and providing instruction related to [properly washing hands](#) and [properly wearing cloth face coverings](#).
- Educate students about how coronavirus is spread, and how preventative actions help avoid the spread.
- Broadcast regular [announcements](#) on school intercoms, and ensure related resources (e.g., messages and [videos](#)) are distributed when communicating with staff, students, and families on school websites, in emails, and social media accounts.
- Place signs near sinks reminding students and staff to wash hands before and after using the restroom.

- Free CDC print and digital resources in several languages are available on the CDC's [communications resources](#) main page.

### Administrator Action Steps:



- Post social distancing and face-covering [signage](#) at all entries, floor landings, and public gathering spaces (offices, lobby, fields, etc).
- Post handwashing [signage](#) in all bathrooms.
- Identify pick-up and drop off areas for buses, walkers, and parent drop-off/pick-up.
- Secure and inventory approved cleaning supplies.
- Secure and inventory PPE and face-covering supplies.
- Identify *Point of Service* location, needs for Plexi-screening and order from facilities.
- Communicate with BBHD nurses regarding attendance monitoring processes.

### Educator Action Steps:



- Secure approved cleaning supplies and hand sanitizer for your classroom.
- Incorporate social distancing, hand washing, and hygiene reminders throughout the day.

### Support Staff Action Steps:



- Incorporate social distancing, hand washing, and hygiene reminders throughout the day.
- Review support plans and IEPs as appropriate for classroom-based adult support needs that may require PPE.

## Responsibilities for Maintenance and Facilities\*\*

To ensure our schools and facilities are prepared for reopening and safe for students and staff the following measures will be implemented:

- Hard surface cleaning protocols on high touch areas including student desks, door handles, common areas will occur frequently throughout the day;
- Locker rooms may be used during school hours;
- Bristol Boys and Girls Club before/after school care will follow cleaning protocols and each space will be cleaned after each session;
- OSHA standards to [protect workers from potential exposure](#) to COVID-19 will be reviewed by all employees;
- BPS human resource policies and practices were reviewed and are consistent with public health recommendations and existing state and federal workplace laws. For more information

Revised: **March, 2024** ~~May, 2023~~ ~~December, 2022~~ ~~June, 2022~~ ~~January, 2022~~ ~~December, 2021~~  
~~August, 2021~~ ~~June, 2021~~

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on employer responsibilities, visit the [Department of Labor's](#) and the [Equal Employment Opportunity Commission's](#).

**\*\*Information will be updated in compliance with CDC and Connecticut Department of Public Health guidelines.**

## Reopening of Facilities Before First Day of Classes

In preparation of the reopening of schools, BPS has reviewed the DPH Guidance for Cleaning and Disinfecting of Schools during COVID-19 and is compliant with all guidance measures. [Link to cleaning protocols/products used in schools.](#)

- BPS is compliant with DPH Return to Service Guidance for Building Water Systems.
- School floor plans were reviewed to consider the spacing and size of student cohorts.
- Water and ventilation system inspections will be completed during the month of August 2021 prior to the start of the 21-22 school year and periodically thereafter.
- All schools will be thoroughly cleaned and disinfected prior to the reopening of school.

## Ventilation\*\*

- BPS has reviewed the DPH Guidance for School Systems for the Operation of Central and non- Central Ventilation Systems during the COVID-19 pandemic and has followed all requirements.
- Regular inspection of building systems will ensure systems are operating appropriately. A schedule to inspect and perform preventive maintenance, remediation (including necessary filter replacements), and repairs before will be maintained.
- BPS will refresh stale indoor air by opening windows when appropriate.
- Increased ventilation rates and increased percentage of outdoor air that circulates into ventilation systems will occur where possible. Air conditioning units will be adjusted to maximize fresh air intake into the system, blower fans will be set at low speed and pointed away from room occupants.
- Window fans will be turned to exhaust air out of the window in the direction of the outdoors. Window fans that blow air into a room or free-standing fans that only serve to circulate existing air around a room will not be used.

**\*\*Information will be updated in compliance with CDC and Connecticut Department of Public Health guidelines.**

## No-Touch Usage

Where possible, no-touch items such as doors, trashcans, and bathroom fixtures have been installed, where no-touch technologies are not available, doors will be propped open in accordance with fire and safety codes, and trash lids will be removed.

## Training Related to Facilities

- All staff will be trained in COVID related mitigation strategies.
- Schools will ensure substitutes or others who join a school community outside of the first day or typical calendar start, receive proper training.
- Training materials and videos will be available to parents/guardians and posted on each school's website.

## Bathroom Protocols Requirements

- BPS will maximize the use of disposable towels in place of hand dryers, due to ventilation considerations.
- BPS has reviewed school floor plans and considered ahead of time the best way to use, assign, and access bathrooms.
- BPS has identified one separate bathroom near the isolation room that would be used in conjunction with any individual who began experiencing symptoms while at school.
- BPS will plan and communicate ways to maximize social distancing in multi-stall shared bathrooms, bathrooms will be assigned to student cohorts, if possible.
- Increased cleaning and disinfection of bathrooms will be consistent with CDC disinfecting and cleaning guidelines.
- A trash can and paper towel roll will be placed by the bathroom door to prevent students and staff from touching the handle with their hands.
- Touch-free single-use paper towel dispensers, garbage bins, faucets, urinals, and toilets have been installed where possible.
- Storage of personal items within the bathrooms is prohibited.

## SOCIAL EMOTIONAL LEARNING (SEL), MENTAL HEALTH, SUPPORTIVE ENVIRONMENTS, WELL BEING OF ALL

Bristol Public Schools will work with all stakeholders to co-create supportive learning environments where all students and educators can enhance their social and emotional competencies, feel a sense of belonging, heal, and thrive.

System-wide structures and practices have been implemented to support students in developing social-emotional competencies. We will ensure our programming and reentry plans focus on:

- Creating emotionally and physically safe, supportive, and engaging learning environments that promote all students' social and emotional development;
- Enhancing social and emotional learning activities familiar to students such as those established through building based morning Advisory, Crew, Squad, PACK, etc.
- Considering the needs of students, families, and staff; garner input through surveys and provide frequent and transparent communication:
- Build and restore community partnerships, and relationships;
- Deepen stakeholders' understanding of and planning for social-emotional learning; and
- Create opportunities for educators to connect, heal, and cultivate their own SEL competencies and capacities







BPS will continue to utilize and expand the SEL Toolkit created for staff, students, and families. The BPS Tool Kit is available at [BPS Social Emotional Learning Tool Kit](#).

BPS employees who have concerns or questions are encouraged to contact the Office of Talent Management at 860-584-7019. 24/7 Employee Assistance Program services for BPS staff and their family members are available by contacting 1-800-275-3327.







BPS will engage all students and families that have been disengaged during remote learning.

Students and parents seeking additional information regarding reopening or community resources should contact the Bristol Public Schools at 860-584-7000.




Additionally, each school will utilize members of the Crisis and Climate Teams to create wrap-around supports for families and students. School-based and community-wide resources include:

School		School-Based Supports	Community-Based Supports
<p><b>Bristol Central High School</b></p> 	<p>Family, SEL Lessons School Psychologists Restorative Circles, Restorative Practices School Counselors</p>	<p>Bristol Youth Services Wheeler Clinical Services Community Health Center Mentors</p>	
<p><b>Bristol Eastern High School</b></p> 	<p>School Counselors School Psychologist Restorative Circles, Restorative Practices/Activities Lancer Nation Mentors, Advisory Homeroom Mindfulness Strategies, LSCI</p>	<p>Wheeler Clinical Services Bristol Youth Services</p>	
<p><b>Bristol Preparatory Academy</b></p> 	<p>SEL Lessons Restorative Practices School Counselor</p>	<p>Bristol Youth Services Wheeler Clinical Services Community Health Center</p>	
<p><b>Chippens Hill Middle School</b></p> 	<p>HIVE SEL, SEBI School Counselor School Psychologist SEL lessons, MTSS Student Support Team</p>	<p>Wheeler Clinical Services Mentors</p>	
<p><b>Northeast Middle School</b></p> 	<p>Circles BIS, SEBI School Counselor, School Psychologist SEL lessons, PBIS</p>	<p>Wheeler Clinical Services</p>	
<p><b>Greene-Hills School</b></p> 	<p>SQUAD, Behavior Interventionists SEBI, School Counselor Social Worker, Restorative Circles School Psychologist Kids At Hope, Mindfulness Strategies</p>	<p>Family Resource Center Wheeler Clinical Services Mentors</p>	

**School-based and community-wide resources (Cont'd)**

<p><b>West Bristol School</b></p>		<p>PACK, Behavior Interventionist                  SELC, SEBIs                  Restorative Circles                  School Psychologists                  School Counselor                  RULER, Calming Corners                  Student Support Team</p>	<p>Family Resource Center                  Wheeler Clinical Services                  Mentors                  Community Health Center</p>
<p><b>Bristol Early Childhood Center</b></p>		<p>STAR Code                  Second Step, SEL Lessons                  CREW</p>	<p>School Psychologist</p>
<p><b>Edgewood Elementary</b></p>		<p>CREW - SEL lessons                  School psychologist, SEBI                  PBIS/Restorative practices, Mindfulness Strategies                  Breaks (brain, sensory, movement)                  Reflect &amp; Reset stations</p>	<p>Wheeler Clinical Services</p>
<p><b>Hubbell Elementary</b></p>		<p>PACK (Crew)                  SELC, School Psychologist                  Restorative Practices, Lunch Bunch                  RULER Strategies/Practices                  Mindfulness Strategies                  Brain Breaks/Movement Breaks/Sensory Breaks</p>	<p>Mentor Program                  Wheeler Clinical Services                  Community Action Team</p>
<p><b>Ivy Drive Elementary</b></p>		<p>PRIDE (Crew)                  SELC, School Psychologist                  Restorative Practices                  RULER Strategies, Mindfulness Strategies                  Brain Breaks/Movement Breaks/Sensory Breaks</p>	<p>Bristol Youth Services                  Wheeler Clinical Services                  Community Action Team                  Mentor Program</p>
<p><b>Mountain View Elementary</b></p>		<p>School Psychologist, SEBI                  Restorative Practices                  RULER Strategies/Practices, Mindful Moment                  Brain Breaks/Movement Breaks/Sensory Breaks</p>	<p>Mentor Program</p>

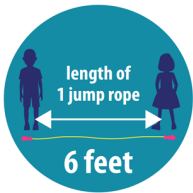
**School-based and community-wide resources (Cont'd)**

<p><b>Stafford Elementary</b></p> 	<p>CREW - SEL lessons                  SOAR Code                  School Psychologist, SEBI                  Restorative practices, Mindfulness Strategies                  Breaks (brain, sensory, movement)</p>	<p>Wheeler Clinical Services                  Community Action Team</p>
<p><b>South Side Elementary</b></p> 	<p>CREW                  SEBI, Lunch Bunch                  School Psychologist                  RULER, Mindfulness Strategies</p>	<p>Family Resource Center                  Wheeler Clinical Services                  Mentor Program</p>
<p><b>Adult Education</b></p> 	<p>School Counselor                  Career Counselor                  Parent Educator</p>	<p>Family Resource Center                  Wheeler Clinical Services                  Central CT Chamber of Commerce                  Tunxis Community College                  United Way                  Bristol Cares</p>

# OPERATIONS

## Classroom Layout

Seating charts will be maintained in all classroom and program spaces including while being transported to and from schools or school related programs.



Social distancing between student workstations of between 3 and 6 feet will be maintained. When feasible, desks should face in the same direction, classrooms with tables will require students to sit on only one side of the table maintaining a 3-6 foot distance.



Space between the teacher and students will be maximized to reduce the risk of increased droplets from teachers during instruction.



Teachers will wear face-covering or masks upon entering the school building. Teachers and staff providing instruction and services for students with hearing impairment will wear clear masks and face shields. For teachers who stay seated, a physical barrier may be utilized.



Floor markings will be installed to illustrate social/physical distancing.

## Flexibility and Compartmentalization of Protective Measures

BPS will adjust policies and protocols related to facilities and operations if and when health conditions change. Any decisions to relax or increase restrictions made by BPS will be made in conjunction with the current guidance of the CDC, and in collaboration with BBHD, DPH, and the CSDE.



A “cohort” is a group or team of students and educators with consistent members that stay together throughout the school day. BPS will cohort and sub-cohort students where possible. The purpose of

cohorting is to limit the number of students who are exposed to or may be diagnosed with COVID-19. Maintaining stable cohorts helps to mitigate the risk of spreading COVID-19.

- A system for cohorting and recording attendance/participation has been established.
- Cohorts are not based upon any specific demographic or disability criteria.
- Teachers and support personnel will restrict mixing between teams.
- Schools will maximize other safety precautions where cohorts may have contact, such as more closely monitored use of facial coverings, hand washing, and sanitizing between cohorts.
- Students that eat lunch or breakfast in their classroom will be asked to wipe down desks before and after eating.
- Cohorts may be assigned specific entry and exit that remain consistent day-to-day.
- BPS will consider a similar design for assignment of restrooms, classrooms, and outside space where it is possible to restrict primary use to a single cohort, or consistent group of cohorts.

## Foot Traffic, Hallways, and Shared Areas

- When necessary, foot traffic and stairwells will be one-way. Foot traffic may be designated throughout the school.
- BPS may designate entrance-only and exit-only doors, wherever feasible.
- BPS will install markings on floors to illustrate foot-traffic expectations.
- Schools may stagger passing in the hall by changing student schedules.



## Outside Time and Playgrounds

- Exposure from playground and fitness equipment will be minimized by the use of hand sanitizer prior to use.

### School Functions

Full school, grade level, or class assemblies will be determined on a case by case basis including:

- Open house and back to school parent events.
- Professional conferences and collaboration.
- Review the testing calendar and anticipate the impact.
- Parent-teacher conferences.
- Field trips.
- Athletics and Arts performances

## TEACHING AND LEARNING

### Core Design principles

Our Bristol Vision of the Graduate is not limited by school walls. We believe that we should strive to continue to develop the skills and knowledge required to meet our vision for students as contributors to our world with the same passion and purpose our students have come to expect when they enter our physical classrooms. While educating on-line will require us to think about our instruction in new, creative and sometimes challenging ways, the characteristics of high-quality instruction remain the same. For all of our students, we will create a positive learning environment (North Star 1). We will share clear and challenging expectations for students (North Star 2). We will engage students in new learning and will offer them opportunities to extend their understanding (North Stars 3 and 4). We will foster individual goal-setting and reflection (North Star 5).

The following design principles guided the development of the plans for teaching and learning when we reopened Bristol Public Schools.

1. Our BPS Instructional North Stars, our model of **high quality instruction**, will guide our design for learning whether in-person or remotely.
2. Our curricular focus will be on the **grade-level learning targets within our curriculum**. We will provide students with the necessary on-ramps to learn grade-level content and skills based on our formative assessment, using an asset not deficit model.
3. We have used the **design process** to build our thinking; it will be a reiterative process as we learn more about our students and their learning. This plan will continue to develop.
4. We will **script the most critical moves** as a springboard for teachers. Collaboration, experience, creativity, and continuous improvement sculpts high quality teaching and learning from the foundational material of common expectations.

### Administrator Action Steps:



- ❑ Narrow teachers' focus, attention to high quality instruction and learning targets within grade-level curriculum

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- Participate in planning and collaboration meetings

### Educator Action Steps:



- ❑ Focus on North Star 1, 2, and 5 in in-person and distance learning
- ❑ Collaborate with supervisors, department chairs, curriculum coordinators, and coaches to identify and plan priority learning targets and success criteria for each unit prior to the start of the unit.
- ❑ Focus on frequent, informal formative assessment to gather information about students' strengths and areas of need as they relate to their achievement of priority learning targets.
- ❑ Share effective strategies and practices with colleagues; anticipate change.

### Support staff Action Steps:



- ❑ Know the priority learning targets for lessons and units
- ❑ Support students' understanding of the learning targets and success criteria
- ❑ Collaborate with educators to identify the most effective scaffolds for each student

## Special Education

Students with Individualized Educational Programs (IEPs) will be provided with a free and appropriate public education (FAPE) in the least restrictive environment (LRE) upon return to full-time in-person instruction.

BPS will treat students eligible for special education as general education students first, meaning that guidance and policies related to school reopening plans apply to all students, including students with special needs who qualify for individual education programs under the IDEA and accommodation plans for eligible students under section 504 of the Rehabilitation Act. In instances where students with disabilities are unable to access the reopening plan as described, individualized and alternative means of re-entry will be facilitated based upon student needs, present levels of functioning, developmental levels, and student/parent input.

## Curriculum Scope and Sequence

The Bristol Public Schools Board of Education curriculum identifies the most essential knowledge and skills our students will need to fulfill the Vision of the Graduate. Using the BPS curriculum, educators will address students' needs and design learning experiences that focus on the principles developed by the CT State Department of Education.

- 1) **BPS will Focus on Families:** Learning plans will consider parents as a true partner in facilitating student learning. BPS will implement a learning plan aimed at providing high-quality learning experiences that will empower students and families to engage in the learning process in novel



and routine ways. BPS will be thoughtful about the expectations placed upon families in the event of remote learning times.

Educators will use the technologies with students within the classroom that they will ultimately require students to use at home should the need arise to return to a remote/distance learning environment, increasing students' independent use of the technology. In addition, teachers will consider educational routines that will transition to remote learning from in-person learning to further bolster students' ability to navigate the online classroom environment within distance learning.

- 2) **BPS will Focus on Quality:** *Teachers and students will have the greatest success when plans build from the instructional plan that was in place for the academic year.*



Bristol Public Schools will continue to implement the recently approved curriculum and the pilot of an elementary mathematics curriculum. Our BPS robust curriculum document includes learning targets that support educators in their transition to planning distance learning lessons in an online environment.

- 3) **BPS will Focus on Mastery:** *Mastery-based learning focuses on the individual student, providing each with the ability to progress at their own pace. Those who can master given material more quickly advance right away instead of waiting for others to catch up — giving them a chance to move even further along than in traditional systems. Teachers should articulate learning competencies as a combined set of state or national standards, district identified competencies within and across grades and content aligned to the vision of the graduate.*



- 4) **BPS will Focus on Equity:**



- All staff and administrators will ensure our most vulnerable students and their families are supported.
- All students will have access to devices and connectivity.
- Digital tools and resources that are mobile-friendly and can be accessed offline will be integrated throughout each model of learning.
- To support families and students, BPS and schools will increase frequency of contact with learners and families.
- BPS staff and administration will ensure we remain mindful of each family and their needs.
- Learning activities will be designed to increase project-based learning and student-driven inquiry projects.
- Culturally and linguistically relevant resources will be provided for each student and family.

- 5) **BPS will Focus on Consistency:**



- *Identify essential outcomes/needs/competencies in content areas at a district level.*
- *Cross-curricular planning to assist in the students' ability to manage work and new responsibilities at home.*

- Create projects/choice boards/playlists that give students and families' flexibility to complete the work and tap interest/motivation.
- Common platforms (suggested or already in use) across a district to alleviate any confusion for parents/ students whether students are completing work online or traditionally.
- All districts, buildings, and grade levels should include non-technology-based options.
- Single-delivery method consistency in expectations, timelines, and communication from the district to teachers, parents, and students.
- Consider ways to focus on relationships and connections, not just content.

6) **BPS will Focus on Simplicity:** *Intentionally plan for an appropriate amount of active instruction per based on the age of children. Give families and staff specific advice about when and how to use recommended materials.*



#### Administrator Action Steps:



- Ensure that teachers are regularly using Seesaw, Google Classroom, and other required technologies; seek mentorships for teachers who need technology support.
- Promote collaborative planning teams to ensure consistency across learning experiences
- Monitor weekly use of the required technology platforms.
- Feedback should be focused on the alignment of teachers' practice to grade-level learning.

#### Educator Action Steps:



- Use Seesaw, Google Classroom, and other required technologies beginning in the first week of instruction as a station or homework.
- Establish a regular routine for students that prompts students to utilize technologies independently prior to distance learning (examples: "do now" posted to Google Classroom, independent reading/writing can be posted independently in Google, homework is posted to and responded to in Google Classroom)
- Follow the Bristol Public School curriculum and/or priority topics specified by your OTL supervisor. Do not begin the school year with a "review" unit.
- Identify and move students toward success criteria
- Ensure and support access to technology
- Frequently communicate with families in their home language(s)
- Focus on developing relationships through developing learners
- Stick to the common district platforms to lessen learning demand on technology for students
- Follow consistent schedules

## Students will return to 100% In-person learning for the 2021-2022 school year.

### Elementary Level

Classroom seating charts will be maintained at all times. At the elementary level, every effort will be made to maintain class and grade level cohorts. Teachers will escort students to their “specials” classrooms and gymnasium for their classes. Mask breaks will be built into the daily schedule.

### Middle Level

Classroom seating charts will be maintained at all times. At the middle school level, students will be in cohorts for their core grade courses. Students will travel to their elective courses and receive instruction in classrooms assigned to the specialty area. Band and choir will be held in the classroom, outside, or in the auditorium to meet the space requirements. Physical education will use the gym, cafeteria, and outdoors as space. Mask breaks will be built into the daily schedule.

### High School

Classroom seating charts will be maintained at all times. At the high school level, students will be in cohorts for their core grade courses. Students will travel to their elective courses and receive instruction in classrooms assigned to the specialty area. Band and choir will be held in the classroom, outside, or in the auditorium to meet the space requirements. Physical education will use the gym, cafeteria, and outdoors as space. Mask breaks will be built into the daily schedule.

### Special Education Instruction and Related Services

Students’ IEPs will be implemented in the cohort model to the greatest extent possible and appropriate based upon individualized needs.

#### Administrator Action Steps:



- Examine the room capacity of every room in the school.
- Review and adjust schedules for specialized instruction.
- Develop guidelines for mask breaks and designate mask break spaces.

#### Educator Action Steps:



- Review health and safety protocols within the reopening plan.
- Consider how instruction could be delivered outdoors when the weather conditions permit.
- Review the daily schedule and plan time for transition and mask breaks along with school leadership.

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## Families Opting Out of Returning to School for Homeschooling

### Homeschooling as an Option to Public School Education (CSDE)

All parents/guardians have the homeschooling option available to them. Parents who wish to homeschool their child/ren should contact the Bristol Board of Education office for information and requirements. In this model, the parent/guardian will educate or will enroll their child in an alternative educational experience (i.e., some on-line learning platforms) and the child is withdrawn from Bristol Public Schools.

Homeschooling parents:

- Complete the [Intent to Homeschool](#) form for each child annually and submit it to the Superintendent's Office for signature. A signed copy should be retained in each child's homeschool folder;
- Review the [Connecticut Core Standards](#). The Connecticut Core Standards provide parents with clear expectations of what a student should know and be able to do at each grade level. Aligning instruction with these standards and competencies will ensure a smoother transition should the child return to public school;
- Keep a log of attendance which reflects days and hours of instruction;
- Maintain a portfolio for each child which contains samples of activities, assignments, projects, and assessments, as well as a log of books and materials used. Include results of any national assessments; and
- Contact potential colleges and universities in order to learn what is required for admission.

## Distance Learning

In the event that BPS and/or BBHD and/or local officials determine that in-person instruction at the school site is not possible due to closure or quarantine, learning will take place online. Building upon our experiences with distance learning from the time of closure due to COVID-19, teachers will use both synchronous and asynchronous instructional methods.

## Special Education During Distance Learning

Students with Individualized Educational Programs (IEPs) will receive their specialized instruction and related services to the greatest extent possible. Special education teachers and staff will continue to utilize SeeSaw and Google Classroom as needed for instruction and related services learning opportunities.

## Role of Stakeholders

*Adapted From: Kirkland, D. (n.d.) Guidance on Culturally Responsive-Sustaining Remote Education Centering Equity, Access and Educational Justice and Plan for Reimagining Connecticut Classrooms for Continuous Learning*

### Teachers

- Continuously work to communicate with and build relationships with families from different racial, cultural, linguistic, ability, and class backgrounds
- Establish regular communication, utilizing translation services as needed
- Learn to teach students online by engaging in professional learning provided by district and school
- Develop digital synchronous and asynchronous protocols & classroom routines encouraging student discourse/group work (Google Meets, etc.)
- Develop lessons based on student needs, differentiating content when appropriate
- Utilize a continuous cycle of reflection/assessment
- Seek feedback and student input regarding routines to meet student need
- Identify your own biases and assumptions regarding distance learning and identify how these may impact the learning experiences of students
- Identify your own biases and assumptions regarding race, socioeconomic status, gender, ability, language, and ensure classroom practices, materials, pedagogies are equity centric.
- Know how to ensure maximum student participation
- Lesson plan effectively with others which provides scope and space for online activities, remote participation and/or face-to-face opportunities
- Adjust remote lessons plans to meet the different needs of students
- Request help when needed, logging questions, best practices, and other insights that come up in the process of remote teaching (i.e., reflective practice)

### District/School Leaders

- Develop a plan for school regarding online learning to provide structure and processes that are consistent across all grades, courses and or content areas
- Ensure sufficient professional development opportunities for educators to help them navigate through changes
- Understand that race, socioeconomic status, ability, language, and other social forces exacerbate inequities in terms of access to resources, opportunities, power, culturally responsive instruction, and education
- Master all of the items under “teacher” and know how to support teachers in doing those things
- Support families in crisis
- Utilize knowledge of and relationships in the school community so they can amplify and leverage resources and supports
- Work to identify their own biases and assumptions regarding distance learning and identify how these may impact the learning experiences of students

- Support opportunities for teacher collaboration to build cohesion among grade levels and schools and to maximize the collective brainpower of the teaching staff
- Prioritize and monitor assisting teachers and observing evidence of student engagement, ownership and agency of learning through virtual “walkthroughs” and classroom check-ins.
- Seek feedback and check understanding of teachers, parents and students surrounding blended learning strategies.
- Empower learners to be active participants in the learning process.
- Provide feedback to teachers and students.
- Champion the implementation of Blended Learning not only in your building but as a highly effective instructional model to support all learners.

## Paraeducators and Other Support Staff

- Support specific students requiring additional instructional or social-emotional supports as identified by general education teachers, special education teachers and/or student support teams
- Meet with small groups and individual students during instruction time and support their learning needs as directed by certified staff.
- Learn to engage in professional learning provided by the district and school.
- Continuously work to communicate with and build relationships with families from different racial, cultural, linguistic, ability, and class backgrounds.

## Parents/Guardians/Family Members

- Collaborate as partners with teachers and administrators in the education of their child in a blended learning environment on campus and remotely.
- Provide feedback to the administrators and teachers as to their learner’s experience, progress, and growth.
- Establish routines in the home that are like a school day
- Identify workspaces in the home for students to engage in learning. Develop a rotating schedule in shared workspaces if needed.
- Engage students in self-reflection of their learning, so that they own their learning and determine how best to work at home and demonstrate growth.

## Student

- Collaborate with teacher and peers in all learning spaces (physical and virtual)
- Students engage in a determined virtual learning session each for identified core content that aligns to independent assignments that they then complete on their own time.
- Students are expected to attend or view learning sessions/content as provided by the teacher(s)
- Students are active participants in the teaching and learning process.
- Students continuously reflect on their own progress of their daily learning plan/schedules adjusting for the next day. Students articulate when they need help.

- Students complete the assigned independent assignments, assessments and tasks and submit each for feedback.

## Instructional Planning

Educators will use the 5E Planning Framework to plan instruction that maximizes student engagement, interaction, and development of conceptual understanding and application of skills.

## Assessment

Assessment is critical in the teaching and learning process. Bristol educators will continue to engage in these best assessment practices:

- Analyze assessment results regularly to predict, inform, and respond to student learning
- Study the end of unit assessments in teams to anticipate greatest areas of struggle for students and to build CFAs within units of instruction as checkpoints
- Study the end of unit assessment to examine the most essential learning for students and plan instruction
- Share evidence of student learning from end of unit/district common assessments with the school leadership team to inform progress toward achieving school goals and plan actions
- Analyze the results of CFAs to determine a targeted instructional plan based on learners' needs
- Examine student work to calibrate expectations of student learning
- Use multiple sources of appropriate data to determine individual students' prior knowledge and skills to plan targeted, purposeful instruction that advances the learning of students.
- Plan and use specific criteria for student success; and plan opportunities for students to self-assess using the criteria
- Plan and use assessment strategies that focus on eliciting evidence of learning at critical points in the lesson in order to assess individual and group progress toward achievement of the intended instructional outcomes
- Provide individualized, descriptive feedback that is accurate, actionable and helps students advance their learning.
- Adjust instruction as necessary in response to individual and group performance

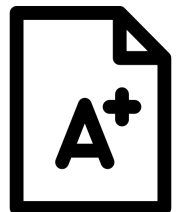
The graphic from *Adapt, Advance, Achieve: Connecticut's Plan to Learn and Grow Together* reinforces these best practices.

### Sensible Assessment Practices in 2020–21 and Beyond

1. Summer 2020	<p><b>★ Review Available Information</b></p> <p>In lieu of a separate assessment, what can we already know about our students from existing data/information?*</p> <hr/> <p><b>Vertical Teams for Teachers, Interventionists, Instructional Specialists, and Related Service Providers</b></p> <ul style="list-style-type: none"> <li>What standards were taught in-person pre-COVID and during distance learning?</li> <li>How does the previous teacher describe the student's strengths and weaknesses?</li> <li>How well did the student engage in distance learning?</li> </ul> <p><b>Longitudinal Data (Non-Assessment)</b></p> <ul style="list-style-type: none"> <li>Early Indication Tool support level (Low-Medium-High), attendance, discipline, mobility, course failures, etc.</li> </ul> <p><b>Longitudinal Data (Assessment)</b></p> <ul style="list-style-type: none"> <li>K-Inventry, Smarter Balanced, NGSS, Alt. Assessments, LAS Links, IAB, F-IAB, Fall/Winter Benchmark, IEP Progress Reports</li> </ul> <hr/> <p><b>★ Plan the First Unit and Support Professional Learning</b></p> <p>The first unit should not only engage students but also ensure that students will have a high probability of success. Teachers will need professional learning on topics such as assessment/data literacy, formative assessment practices, differentiated instruction, learning progressions, blended learning approaches/tools.</p> <hr/> <p><small>*Students new to CT public schools will likely need a screening and/or overall assessment such as the ICA or a local benchmark assessment.</small></p>
2. Start of the School Year	<p><b>★ Build Community with New Class While Delivering the First Unit</b></p> <p>Acknowledge and address social-emotional learning needs and family/health/trauma issues due to pandemic. Start with a unit that is engaging and has high probability of success. Review key prior grade content if necessary.</p> <ul style="list-style-type: none"> <li><b>Deliver differentiated instruction</b> by starting with engaging on-grade unit with high probability of success; review if necessary.</li> <li><b>Use formative assessment practices</b> to gauge impact and adjust instruction.</li> <li><b>Embed Tier 2 supports</b> in the classroom based on review of available information in the summer.</li> </ul>
3. Rest of the School Year	<p><b>★ Shift Fully to On-Grade Instruction with Scaffolds and Supports</b></p> <p>If the first unit incorporates review, then the shift fully to on-grade instruction should occur within 2–3 weeks. Districts should identify prerequisite content for each instructional unit and the corresponding diagnostic assessment.</p>
4. End	<p><b>★ Administer End-of-Year Summative Assessment</b></p> <p>Administer an on-grade summative assessment (which may be the state assessment for students in Grades 3–8 and 11) to evaluate overall achievement on state standards</p>

## Grading

Grades are one communication tool that provides students and families with information about how they are progressing within the curriculum. At this time, there are no proposed changes to the grading system with which our students and families are most familiar.



## Technologies

All applications that require the use of personally identifiable information that will be utilized within our district must have signed the CT Student Data Privacy compliance pledge. Applications that have signed this pledge are shown here on [CT EdTech Learn Hub](#). If students are asked to “join using their Gmail address” the application is requiring personally identifiable information. If you find an application that you would like to use, you will need to check that the application is on the Learn Hub.

## Expectations

All educators will be expected to use the following technologies in support of student learning within their classrooms:

### Seesaw in Grades Pre-K through 2



The main platform to be used for the academic school year for our earliest learners will be Seesaw. Schools will create a plan with their school community to determine how Seesaw will be structured and organized across grade levels and content areas to provide consistency. Seesaw will be utilized as an extension of the classroom and will be utilized both in the classroom and at home.

### Google Classroom in Grades 3-12



The main platform to be used for the academic school year is Google Classroom. Schools will create a plan with their school community to determine how Google Classrooms will be structured and organized across grade levels and content areas to provide consistency. Google Classroom will be utilized as an extension of the classroom and will be utilized both in the classroom and at home.

### Google Drive

The main platform for using documents that integrate with Google Classroom and the G-Suite apps.

### Google Docs, Forms, Slides



Teachers of all levels should begin to use these applications within the classroom so that students will have familiarity with working within these applications should the need arise to return to distance learning. Students should be able to access, review, and type into these applications.

### Google Voice



Google Voice is a telephone service that provides call forwarding and voicemail services, voice and text messaging, as well as U.S. and international call. Google Voice provides a U.S. telephone number, chosen by the user from available numbers in selected area codes, free of charge to each user account.

## Loom



This application is a screencasting tool that can be used to provide instructional videos, demonstrate learning, and provide feedback.

## Specific Content Supportive Software

### Lexia, Grades K-2



Lexia is a software application focused on developing literacy in early readers. Students work independently to develop critical reading and language skills through individualized, motivating learning paths. All students, regardless of their skill level, can each work at their own pace and the teacher is notified (on web-based reports and via email) only when they require support.

### ST Math, Grades K-5



ST Math is a software application that provides students with equitable access to learning mathematics through challenging puzzles, non-routine problem solving, and informative feedback so that students build deep conceptual understanding.

### Aleks, Grades 6-12



Assessment and LEarning in Knowledge Spaces is a Web-based, artificially intelligent assessment and learning system. ALEKS uses adaptive questioning to quickly and accurately determine exactly what a student knows and doesn't know in a course. ALEKS then instructs the student on the topics she is most ready to learn. As a student works through a course, ALEKS periodically reassesses the student to ensure that topics learned are also retained.

### Newsela, Grades 6-12



Newsela.com is an education website focused on building student reading comprehension by providing high-quality news articles and real-time assessments for students in grades 2–12

## Recommendations

### Padlet



Within the classroom, Padlet is a virtual discussion board. It can be used to collect positive **padlet** examples or evidence, as a portfolio tool, or as a discussion board.

### FlipGrid



Within the classroom, Flipgrid allows students to record a video response. Educationally, it could be used for language testing, video essays, demonstration videos or to record problem-solving strategies.

### Peardeck



This application utilizes slides to integrate interactive opportunities. It allows for formative assessment both in-person and through distance learning.

### Edpuzzle



This application allows users to add questions to uploaded YouTube or uploaded video. This **edpuzzle** application can be used for checking for understanding.

## Technology Instruction

Learning targets and plans have been identified to support learners' digital citizenship. Library media specialists will be providing students with these lessons upon the opening of school. These learning plans can be found [here](#).

## Technology Supports

Students and/or families experiencing technical difficulties should first contact the child's teacher. The teacher will do his or her best to resolve the technical issue. If the teacher is unable to resolve the problem, the teacher will inform the school instructional technology leader. The IT leader for the school will work with the student and/or family to resolve the technical difficulty. If the issue extends beyond support with the applications the student is using, the IT leader will refer the issue to our technicians within the Instructional Technology department. Additionally, students and/or families can call the technology help desk at (860)584-7090 or email their question to [boehelpdesk@bristol12.org](mailto:boehelpdesk@bristol12.org).

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Additionally, Bristol educators will be able to access the [Technology Toolkit](#), compiled by educators across the district to support the use of technological tools to support learning.

## Art, Music, Physical Education

All art, music, and physical education classes will follow CDC and state guidelines related to social distancing and cleaning areas and equipment used for physical education and physical activity, including recess.

### Art and Music Education

Teachers and students will need to maintain proper spacing when students are singing or performing wind instruments as directed by state/local guidelines. Distancing is critical for instruments that require blowing or for singing, compared to spacing needed for percussion instruments. **We will continue to use bell covers and disposable pads on an as needed basis.**

**At this time, designated use materials are not required.** If necessary, Bristol Public Schools will provide individual art supply kits for each student in grades K-5 and for students enrolled in art courses at the middle or high school, allowing students to continue their learning in these areas should the need arise to return to distance learning.

### Physical Education

Most often, physical education will take place in the gymnasium or outdoors at elementary, middle, and high school levels. On days students are scheduled to take a physical education class, students should wear sneakers and comfortable clothes.

Physical education teachers will focus on activities, fitness, exercises, and sports that are teacher led but performed individually and focus on lifetime fitness. Examples of these activities are: tai chi, meditation, fitness-based activities, power walking, outdoor education, track and field, singles racket games, etc. Teachers will embed social-emotional learning through classroom instruction and through the utilization of appropriate games and activities.

Teachers will match the instructional design to the available space; use stations, marked off areas, and staggered participation to ensure separation and distancing between students during activities.

Regular cleaning and disinfection of indoor and outdoor facilities and equipment will be done between student use.

### Career Technical Education

Please reference [this plan](#) for the specific guidance for cleaning and disinfection of CTE classrooms and equipment.

Should the district enter distance learning, adjustments to course curriculum have been pre-planned so that instruction can continue remotely. Adjustments to the course descriptions can be found [here](#).

## Use of Library

- **Library visits.** Students can physically go to the library, cohorts should be maintained as appropriate..
- **Virtual browsing.** Students and educators will use resource lists, circulation software, booktalk playlists, and other curation tools to allow students to browse without touching.
- **Browsing precautions.** Students and teachers should wash hands before and after handling any books. Students should only touch books they intend to borrow.
- **Encourage digital materials.** Share and promote ebooks, audiobooks, and digital resources available from the school and public libraries.
- **Quarantine materials.** After use, books should be quarantined for 72 hours before reshelving or loaning to another student. Bins are recommended for collecting and storing books.

## Considerations for Students

### English Learners (ELs)

While returning to school will present challenges for all, English learners (ELs) may experience these challenges to a greater extent than their peers, as they transition to a school setting from remote learning and continue to develop their English language proficiency while learning grade-level academic content. To mitigate these challenges, Bristol Public Schools will provide support to ELs to allow access to academic content as well as provide a supplemental language instruction program. English language development is a part of universal instruction. It is critical that grade level content is provided with adequate scaffolds and supports, so ELs may access the grade level content being provided in the classroom while developing language proficiency.

Like all other students, ELs are entitled to FAPE. The Civil Rights Act of 1964, Title IV, the Equal Educational Opportunities Act (1974) and the Elementary and Secondary Education Act (1965) provide guidance on these services. Our EL scholars will have access to the general education curriculum and a supplemental language instruction program. During school closures due to COVID-19, ELs are entitled to receive their supplemental EL instructional program in addition to their general education program of mainstream, grade-level and content-area instruction.

Our district will communicate with parents and guardians who have limited proficiency in English in a language they understand as required by Title III of the Elementary and Secondary Education Act. As during traditional schooling, communications during school closure may be provided through translation and/or interpretation.

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Dually identified students, students who are English learners and as students with disabilities will be provided with supports for their EL needs as well as supports for their disabilities. Dually identified students should have their language needs represented in their annual meetings about their IEP.

Collaboration among grade-level and content-area teachers and teachers supporting English Learners is critical. Core teachers will embed accessibility tools, such as scaffolds, explicit vocabulary instruction and differentiated support into grade-level and content-area instruction. Educators must also attend to the social emotional learning needs of English learners, understanding that ELs may have unique, individual needs from each other and their non-EL peers.

Grade-level and content-area teachers are strongly encouraged to take these online, high-quality professional learning experiences through the [Pathways to Success for English Learners](#). These courses are free of charge.

Detailed plans regarding the statewide identification process and adherence to annual English language proficiency will be developed when the CSDE publishes additional direction.

EL and Bilingual teachers will need to develop their schedule maintaining student cohorting in grades K-8 and to the greatest extent possible meet the CSDE recommendations for direct instructional service for English learners based on their current LAS level.

## PROFESSIONAL LEARNING AND COLLABORATION

Bristol Public Schools is committed to the improvement of the performance of students, staff, and the organization through results-driven professional learning, which is aligned to the strategic work of the district and each school. Professional learning for staff is engaging, relevant, collaborative, and job-embedded and aligned to academics and professional standards.

It is important that we provide all users with access to current information and resources that will increase student achievement as well as empower collaborative learning, problem-solving, creativity, innovation, and informed decision making. The primary goals of professional learning are:

- Provide cohesive professional learning around Bristol’s research-based, effective student learning principles and instructional practices found within our Instructional North Stars. Professional learning will focus on North Star 1: Positive Learning Environment, North Star 2: Clear and Challenging Expectations, and North Star 5: Individual Goal-Setting and Reflection.
- Provide professional learning that focuses on implementation of practice across learning contexts: in-person, blended, and remote learning teaching environments.
- Infuse digital learning tools into current methodologies so that all staff have technical skills to support today’s learners in all learning contexts.
- Ground all professional learning in the goal of bringing equity to our classrooms and schools
- Embed social emotional learning into core learning experiences
- Strengthen content area pedagogy through specific professional learning

### Professional Learning Modules

Bristol Public Schools will develop eight learning modules to address needs presented during reopening. Modules are designed flexibly so that they can be delivered in all learning contexts (100% return, blended, or remotely).

1. **School-Level Focus: Organizing for Learning**
  - a. This session will focus on school routines, protocols and procedures necessary for the reopening of schools.
2. **School-Level Focus: Positive Climate and Culture-Part A: Schoolwide Expectations**
  - a. This session will focus on schoolwide expectations to support a positive school climate and culture. Topics will include: creating relationships and positive classroom communities, examining student attendance and performance data, identifying students most at-risk in distance learning, developing multi-tiered systems of support for students.

3. **School-Level Focus: Positive Climate and Culture-Part B: Focus on Equity**
  - a. This session will focus on creating a learning/growing community within our schools. Educators will develop an understanding of their story of self, their racial identity, the impact of bias, and will develop a vision of equity in their school and classroom.
4. **Classroom-Level Focus: Organizing for Learning**
  - a. This session will focus on developing organization and communication structures for blended and remote learning classrooms utilizing the tools of Seesaw, Google Classroom, and PearDeck.
5. **Classroom-Level Focus: North Star 1-Positive Learning Environment**
  - a. This session will focus on using crew or advisory to support students' social-emotional growth, developing a sense of community and belonging through synchronous and asynchronous methods in a distance learning environment, and increasing opportunities both synchronously and asynchronously for student discourse and collaboration. Technological tools taught will be: Zoom, Padlet, Flipgrid
6. **Classroom-Level Focus: North Star 2-Clear and Challenging Expectations**
  - a. This session will focus on 5E planning for both synchronous and asynchronous learning. Special attention will be dedicated to supporting teachers in building highly effective, focused, and specific explanations of content, particularly in an asynchronous context. Content-specific teaching concerns will be addressed in this session. Technological tools taught will be: Edpuzzle, ST Math, Lexia, Newsela, and ALEKS
7. **Classroom-Level Focus: North Star 5-Individual Goal-Setting and Reflection**
  - a. This session will focus on formative assessment and feedback as it relates to students' individual goal setting and reflection on their learning. Technological tools taught will be: Google Forms, Peardeck
8. **Classroom-Level Focus: Personalizing Learning**
  - a. This session will focus on using the universal design for learning, accommodating and modifying instruction within an e-learning environment, and collaborating with colleagues through co-teaching.

The fundamental purpose of our organization is to ensure high levels of learning for each and every student and adult by shifting the focus on teaching to a focus on learning. Helping all students and adults learn requires a collaborative and collective effort.

When educators share a sense of collective efficacy they have a greater likelihood of positively impacting student learning, over and above any other influence. Educators with high efficacy show greater effort and persistence, a willingness to try new teaching approaches, set more challenging goals, and attend more closely to the needs of students who require extra assistance (Hattie, Visible Learning, 2017). In addition, when collective efficacy is present, educators are better equipped to foster positive relationships with

students and in raising students' expectations of themselves by championing students' beliefs that they can do well in school.

We must focus on learner outcomes to inform and improve professional practice through job-embedded, differentiated professional development to meet the needs of students through guaranteed and viable Tier 1 instruction, enrichment and intervention. Aligned to the BPS Standards for Professional Learning, BPS staff will engage in cycles of continuous instructional improvement. Instructional Improvement Cycles are structured to intentionally promote positive, and measurable student results. Time is built into the elementary school day to allow teachers the opportunity to collaborate with one another. Teachers at the secondary level will be able to collaborate with colleagues on scheduled Wednesday afternoons. Teachers will be able to work together following social distancing guidelines outlined earlier in this document. Educators will be utilizing Zoom to interact synchronously for the purposes of collaboration across schools.

## **Instructional Coaching**

Bristol Public Schools instructional coaches are agents of change for our continuous innovation and improvement across the district. Their goal is to drive high quality instruction and lift student achievement by shaping positive learning interactions with and among educators, personalizing learning for educators, acting strategically, and guiding reflection. Coaches will continue to coach individuals and teams, lead professional development, and collaborate with school leadership to elevate instructional practice and student achievement.

# SCHOOL SERVICES

## Transportation

### Family or Guardian Transport

Parents and/or guardians may choose to transport their children to school.

BPS will assess and prepare for safely accommodating increased parent traffic in school lots as needed.

### Pick Up/Drop Off

Arrival/departure procedures that limit unnecessary entrance of visitors, parents and guardians into the building will be determined by building location.

### Buses, Vans and Student Transportation Vehicles

Proactive strategies for bus transportation will align with the tiered system established by DPH to assist with the status of ridership within BPS.



#### Safe Status

Bus transportation can operate with no restrictions.



#### Low Status

Bus transportation can operate up to full status with mask requirements and loading and unloading restrictions.



#### Moderate Status

Bus transportation can operate with seating and spacing restrictions, mask requirements, and loading and unloading restrictions.

Where there is low transmission risk in the community and some restrictions are in place in schools, buses will be able to operate up to full capacity. With regard to buses operating at high capacity levels, BPS will prioritize assessing alternative options and increase monitoring of the mitigating strategies.

Students will be required to wear a face mask or cloth face covering that completely covers the nose and mouth during transit. The student's face covering must be in place prior to boarding the bus and must be kept in place until they are completely off the bus. Students will load into the bus from the back row to the front (where the first passengers onto the bus sit in the back row) and then unload the bus in a controlled manner upon arrival at the school from the front of the bus to back of the bus by seat and row. This will

reduce the number of people passengers walk by as they get on the bus and will prevent crowding in the center aisle when students disembark from the bus.

Passenger density will be significantly reduced when there is moderate spread, because schools will be employing other strategies such as remote blended-learning. Students with family members will sit together while non-family members will be spaced 6 feet apart utilizing alternating diagonal seating. Passengers will be required to wear a face mask or cloth face covering that completely covers the nose and mouth during transit. The rider's face covering must be in place prior to boarding the bus and must be kept in place until they are completely off the bus. Students will load into the bus from the back row to the front row (where the first passengers onto the bus sit in the back row) and then unload the bus in a controlled manner upon arrival at the school from the front of the bus to back of the bus by seat and row.

BPS will provide face coverings to students if students do not have face coverings when boarding the bus or van.

Bus drivers will not allow passengers to change seats during the route. Additionally, students are expected to ride the same bus to school in the morning and ride the same bus home at dismissal each day.

Transportation companies are required to plan to increase cleaning and sanitizing for all vehicles, and keep associated logs. Companies that contract with BPS are expected to effectively communicate cleaning protocols, including measures to prevent harmful human exposure to chemicals, please review **Appendix A** for each company's cleaning measures.

## Child Nutrition

- Schools that participate in the National School Lunch Program (NSLP), School Breakfast Program (SBP), Afterschool Snack Program, and Special Milk Program (SMP), will make available free and reduced-price meals and snacks and free milk to all eligible students.
- Schools must comply with the U.S. Department of Agriculture's (USDA) regulations and policies for school meals and milk including the meal pattern requirements.
- Schools that participate in the NSLP are required to claim meals/ milk provided to eligible students using accurate counting and claiming methods. Additionally, the number of free and reduced-price meals served and claimed for reimbursement must have adequate documentation on file to support the claim.
- Hydration is important for student health and safety. Students will not be able to use water fountains. Teachers will encourage students to use personal water bottles. Hydration stations will be set up within schools with paper cups and water for students.

BPS will determine on-site Meal Service distribution (for students while in school) based on social distancing, physical location, student traffic, space, staffing, etc.

- **Cleaning and Sanitation:** In consultation with the appropriate local health departments, food safety protocols, including standard operating procedures for sanitation of school kitchens, cafeterias, food

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**Current Guidance from DPH and CSDE supersedes any information codified in this document.**

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warehouses, alternative meal distribution locations, and central production kitchens will be updated and implemented. Personal Protective Equipment (PPE) will be required and provided in food service operations such as masks, gloves, physical barriers in serving areas, etc.

- Continued communication with families will include notifying parents and the school community about school meal service and options.

## APPENDIX

### Appendix A: Transportation Vendor Protocols

#### Ambassador

- Vehicles are cleaned and disinfected on a regular basis
- When drivers/monitors arrive at work they have their temperature taken
- Drivers, monitors and passengers will wear face masks when in the vehicles
- Vehicles are equipped with alcohol based hand rubs and disposable towels
- Touchpoints will be cleaned before and after each run
- Drivers will report any health concerns
- Spare drivers from other depots can be utilized if necessary for large call outs

#### Cardinal

- New vendor

#### Curtin

- Location Manager ensures that vehicles are kept clean by driver and maintenance staff
- Drivers from other depot locations can be utilized if necessary for large call outs
- When drivers/monitors arrive at work they have their temperature taken
- Drivers, monitors and passengers will wear face masks when in the vehicles
- Vehicles are equipped with 70% alcohol based hand rubs and disposable towels
- Touchpoints will be cleaned before and after each run
- Drivers will report any health concerns
- Vehicles have dividers between the driver and passenger compartments on cars
- Masks will be on board in case a passenger comes to the vehicle without

#### First Student

- Buses are deep cleaned at the beginning of each school year
- All buses will be treated with a monthly application of Zoono Z-71 Microbe Shield Surface Sanitiser, with a secondary application to handrails, top of seats and drivers steering wheel weekly
  - Sanitizing germ protection spray that kills 99.99% of germs and keeps critical surfaces and touchpoints hygienic for longer.
  - Protects against 99.99% of bacteria for up to 30 days
  - Forms an antimicrobial coating that bonds to surfaces
- Drivers are responsible for the cleanliness of their buses
- Drivers/Monitors will wear face masks
- Students will be required to wear face masks
- Masks will be on board each bus in case a student arrives without one
- First Student yards can be utilized to fill call outs if necessary

## Appendix B

### Links and Resources

[DPH Launching Into Healthy Learning](#)

[CSDE 2022-23 School Guidance](#)

[2.24.2022 BBHD Statement on COVID](#)

[Family and Student Resource Guide](#)

[DPH Municipal Guide Risk Level Mitigation Strategies](#)

[CIAC Winter Sports Guidelines](#)

[Screen and Stay](#)

[Public Act 21-6 An Act Concerning Immunizations](#)

[Special Education Recovery](#)

[DPH School District End of Year Activities](#)

[Finish Strong CSDE and DPH](#)

[CSDE - The Future of Remote Learning](#)

[CSDE and DPH Interim Fall Guidance](#)

[DPH Statewide Snapshot March, 2020-July, 2021](#)

Course Title:	Content Area:	Grade Level:	Credit (if applicable)
AP Precalculus	Mathematics	10-12	1.0
<b>Course Description:</b>			
<p>AP Precalculus centers on functions modeling dynamic phenomena. This research-based exploration of functions is designed to better prepare students for college-level calculus and provide grounding for other mathematics and science courses. In this course, students study a broad spectrum of function types that are foundational for careers in mathematics, physics, biology, health science, business, social science, and data science. Furthermore, as AP Precalculus may be the last mathematics course of a student's secondary education, the course is structured to provide a coherent capstone experience rather than exclusively focusing on preparation for future courses.</p> <p>Throughout this course, students develop and hone symbolic manipulation skills, including solving equations and manipulating expressions, for the many function types throughout the course. Students also learn that functions and their compositions, inverses, and transformations are understood through graphical, numerical, analytical, and verbal representations, which reveal different attributes of the functions and are useful for solving problems in mathematical and applied contexts. In turn, the skills learned in this course are widely applicable to situations that involve quantitative reasoning.</p> <p>AP Precalculus fosters the development of a deep conceptual understanding of functions. Students learn that a function is a mathematical relation that maps a set of input values— the domain—to a set of output values—the range—such that each input value is uniquely mapped to an output value. Students understand functions and their graphs as embodying dynamic covariation of quantities, a key idea in preparing for calculus. With each function type, students develop and validate function models based on the characteristics of a bivariate data set, characteristics of covarying quantities and their relative rates of change, or a set of characteristics such as zeros, asymptotes, and extrema. These models are used to interpolate, extrapolate, and interpret information with different degrees of accuracy for a given context or data set. Additionally, students also learn that every model is subject to assumptions and limitations related to the context. As a result of examining functions from many perspectives, students develop a conceptual understanding not only of specific function types but also of functions in general.</p>			
<b>Aligned Core Resources:</b>		<b>Connection to the <a href="#">BPS Vision of the Graduate</a></b>	
AP Classroom (digital-access)		<p><b>CONTENT MASTERY</b></p> <ul style="list-style-type: none"> <li>Develop and draw from a baseline understanding of knowledge in academic disciplines from our Bristol curriculum.</li> </ul> <p><b>CRITICAL THINKING AND PROBLEM SOLVING</b></p> <ul style="list-style-type: none"> <li>Collect, assess and analyze relevant information</li> <li>Reason effectively. Use systems thinking.</li> <li>Make sound judgments and decisions. Identify, define and solve authentic problems and essential questions.</li> <li>Reflect critically on learning experience, processes and solutions.</li> <li>Transfer knowledge to other situations.</li> </ul>	
<b>Additional Course Information:</b> <i>Knowledge/Skill Dependent courses/prerequisites</i>		<b>Link to <a href="#">Completed Equity Audit</a></b>	
		<a href="#">AP Precalculus Equity Audit</a>	
<b>Standard Matrix</b>			

<b>AP/College Board Mathematical Practices</b>			
	<b>Unit 1</b>	<b>Unit 2</b>	<b>Unit 3</b>
<b>Practice 1: Procedural and Symbolic Fluency</b>			
1.A Solve equations and inequalities represented analytically with and without technology.			X
1.B Express function equations, or expressions in analytically equivalent forms that are useful in given mathematical or applied content.			X
1.C Construct new functions, using transformations, compositions, inverses, or regressions, that may be useful in modeling contexts, criteria, or data with and without technology.			X
<b>Practice 2: Multiple Representations</b>			
2.A Identify information from graphical, numerical, analytical and verbal representations to answer a question or construct a model with or without technology.		X	
2.B Construct equivalent graphical, numerical, analytical, and verbal representations of functions that are useful in a given mathematical or applied context, with and without technology.		X	X
<b>Practice 3: Communication and Reasoning</b>			
3.A Describe the characteristics of a function with varying levels of precision, depending on the function representation and available mathematical tools.	X		
3.B Apply numerical results given mathematical or applied context.	X		
3.C Support conclusions or choices with a logical rationale or appropriate data.			X
<b>Unit Links</b>			
<p>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</p> <p><a href="#">Polynomial and Rational Functions</a></p> <p><a href="#">Exponential and Logarithmic Functions</a></p> <p><a href="#">Trigonometric and Polar Functions</a></p>			

<b>Unit Title:</b>	
Polynomial and Rational Functions	
<b>Relevant Standards: Bold indicates priority</b>	
<p>3.A 3.B</p> <p>Throughout the course, students should practice communicating mathematics and developing notational fluency—and that practice should begin in Unit 1. Students should use precise language such as, “On the closed interval 0 to 1, as the value of <math>x</math> increases, the value of <math>y</math> increases then decreases.” To the fullest extent possible, students should work on functions presented in contextual scenarios such as graphs showing distance vs. time, tables showing velocity vs. time, or scenarios involving volume vs. time. In these contexts, students should use clear language when referring to variables and functions, including units of measure as appropriate. For example, when considering a problem of filling a pool with water, a student may write, “The input values of the function <math>V</math> are times in minutes, and the output values are volumes in cubic meters. The average rate of change of the function <math>V</math> over the time interval <math>t</math> equals 2 minutes to <math>t</math> equals 5 minutes is 0.4 cubic meters per minute.” Practicing communicating with precise language can help students clarify their thinking and make important connections while revealing misconceptions.</p>	
<b>Essential Question(s):</b>	<b>Enduring Understanding(s):</b>
<ul style="list-style-type: none"> <li>• How do we model the intensity of light from its source?</li> <li>• How can I use data and graphs to figure out the best time to purchase event tickets?</li> <li>• How can we adjust known projectile motion models to account for changes in conditions?</li> </ul>	<p>After studying Unit 1, students should be able to describe, represent, and model polynomial and rational functions and their additive and multiplicative transformations. Because part of the exam relies on technology, students should be able to identify zeros, points of intersection, and extrema using graphing calculator technology. Students should be able to calculate linear, quadratic, cubic, and quartic regressions to model a data set. In the free-response section of the exam, students will not only be required to arrive at a solution but also explain and provide rationales for their conclusions. Students should practice providing reasons for conclusions throughout the unit in both spoken and written form and continually refine their explanations to improve precision.</p>
<b>Demonstration of Learning:</b>	<b>Pacing for Unit</b>
Certified AP assessments and released items.	8 Weeks
<b>Family Overview (link below)</b>	<b>Integration of Technology:</b>
AP Classroom Resources (requires student login)	<i>Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning</i>
<b>Unit-specific Vocabulary:</b>	
Graphical, Numerical, Analytical, Verbal, Rate of change, Average rate of change, Function, Domain, Range, Even/Odd Function, Increasing, Decreasing, Input, Output, Independent, Dependent, Linear, Quadratic, Polynomial, Rational, Asymptote, Horizontal, Vertical, Zeros, Intersections, Roots, Interval, Secant Line, Tangent Line, Equal-Length, Consecutive, Covariation, Variable, Distinct, Extrema, Absolute, Global, Maximum, Minimum, Local,	

Relative, Multiplicity, Complex, Conjugate, Multiplicative transformation, Additive transformation, Contextual, Limit, Dilation, Continuous, Parent Function, Quadratic, Cubic, Quartic, End Behavior, Degree, Regression, Boundedness, Successive differences, Inflection point, Multiplicity of zeros, Concavity

**Differentiation through *Universal Design for Learning***

UDL Indicator	Teacher Actions:
<p><b>Comprehension:</b></p> <ul style="list-style-type: none"> <li>• Activate or supply background knowledge</li> </ul>	<ul style="list-style-type: none"> <li>• Anchor instruction by linking to and activating relevant prior knowledge (e.g., using visual imagery, concept anchoring, or concept mastery routines)</li> <li>• Use advanced organizers (e.g., KWL methods, concept maps)</li> <li>• Pre-teach critical prerequisite concepts through demonstration or models</li> <li>• Bridge concepts with relevant analogies and metaphors</li> </ul>

**Supporting Multilingual/English Learners**

Related <i>CELP standards:</i>	Learning Targets:
An EL can construct grade appropriate oral and written claims and support them with reasoning and evidence.	All learning targets in this unit support CELP standard 9-12.

Lesson Sequence	Learning Target	Success Criteria/Assessment
1 Change in Tandem	<p>I can describe how the input and output values of a function vary together by comparing function values.</p> <p>I can construct a graph representing two quantities that vary with respect to each other in a contextual scenario.</p>	<ul style="list-style-type: none"> <li>• I can identify the domain and range of a function.</li> <li>• I can compare two quantities that are changing.</li> <li>• I can identify the intervals of increase and decrease of a function given a table or graph.</li> <li>• I can identify over which intervals the graph of a function is concave up or concave down and justify my reasoning.</li> </ul>
2 Rates of Change	<p>I can compare the rates of change at two points using average rates of change near the points.</p> <p>I can describe how two quantities vary together at different points and over different intervals of a function</p>	<ul style="list-style-type: none"> <li>• I can determine the average rate of change of a function given a table and an equation.</li> <li>• I can determine the average rate of change of a function at a point given an equation.</li> <li>• I can use the average rate of change to describe how the function behaves over an interval or at a point.</li> </ul>
3 Polynomial Functions and Rates of Change	<p>I can determine the average rates of change or sequences and functions, including linear, quadratic, and other function types.</p> <p>I can determine the change in the average rates of change for linear, quadratic, and other function types.</p>	<ul style="list-style-type: none"> <li>• I can identify a linear function by finding the average rate of change from a table.</li> <li>• I can identify a quadratic function by finding the average rate of change from a table.</li> <li>• I can determine if a function is concave up or down by calculating the average rate of change over equal length intervals from a table.</li> </ul>
4	I can identify key characteristics of	<ul style="list-style-type: none"> <li>• I can identify the degree, relative extrema, absolute</li> </ul>

Polynomial Function and Rates of Change	polynomial functions related to rates of change.	<p>extrema, and inflection points of a function given a graph.</p> <ul style="list-style-type: none"> <li>• I can determine if a polynomial function is increasing or decreasing by calculating the average rate of change over various intervals.</li> </ul>
5 Polynomial Functions and Complex Zeros	<p>I can identify key characteristics of a polynomial function related to its zeros when suitable factorizations are available or with technology.</p> <p>I can determine if a polynomial function is even or odd</p>	<ul style="list-style-type: none"> <li>• I can determine the number of complex zeros of a polynomial function.</li> <li>• I can find the zeros of a polynomial function.</li> <li>• I can determine the multiplicity of a zero of a polynomial function given its graph.</li> <li>• I can determine if a function is even or odd given a table, graph, or equation.</li> </ul>
6 Polynomial Functions and End Behavior	I can describe end behaviors of polynomial functions.	<ul style="list-style-type: none"> <li>• I can state the end behavior of a function using limit notation given a graph, table, or equation.</li> </ul>
7 Rational Functions and End Behavior	I can describe the end behaviors of rational functions.	<ul style="list-style-type: none"> <li>• I can analyze the degree of the numerator and denominator of a rational function to determine if a function has a horizontal/slant asymptote.</li> <li>• I can determine the end behavior of a rational function given a table, graph or an equation using limit notation.</li> </ul>
8 Rational Functions and Zeros	I can determine the zeros of rational functions	<ul style="list-style-type: none"> <li>• I can simplify the equation of a rational function by factoring its numerator and denominator.</li> <li>• I can determine the zeros of a rational function by analyzing the numerator of its simplified form.</li> <li>• I can use a sign chart to solve a rational inequality.</li> </ul>
9 Rational Functions and Vertical Asymptotes	I can determine vertical asymptotes of graphs of rational functions	<ul style="list-style-type: none"> <li>• I can determine the zeros of a rational function by simplifying the function and analyzing the denominator.</li> <li>• I can determine where the values of a rational function increase or decrease without bound using limit notation from a graph or table.</li> </ul>
10 Rational Functions and Holes	I can determine holes in graphs of rational functions.	<ul style="list-style-type: none"> <li>• I can determine the holes of a rational function by factoring the function and analyzing both the numerator and denominator.</li> <li>• I can determine the location of a hole at <math>x = c</math> by examining the behavior of a rational function as <math>x</math> approaches <math>c</math> using limit notation.</li> </ul>
11 Equivalent Representations of Polynomial and Rational	<p>I can rewrite polynomial and rational expressions in equivalent forms.</p> <p>I can determine the quotient of two polynomial functions using long division.</p>	<ul style="list-style-type: none"> <li>• I can convert a polynomial function between standard form and factored form.</li> <li>• I can convert a rational function between standard form and factored form.</li> <li>• I can use long division to determine the equations of a slant asymptote of a rational function.</li> </ul>

Expressions	I can rewrite the repeated product of binomial using the binomial theorem.	<ul style="list-style-type: none"> <li>● I can use Pascal's triangle to perform a binomial expansion.</li> </ul>
12 Transformations of Functions	I can construct a function that is an additive and/or multiplicative transformation of another function.	<ul style="list-style-type: none"> <li>● I can vertically/horizontally translate a function given an equation or a graph.</li> <li>● I can vertically/ horizontally dilate a function given a graph or an equation.</li> <li>● I can reflect a function given a graph or an equation.</li> <li>● I can determine the domain or range of a transformed function.</li> </ul>
13 Function Model Selection and Assumption Articulation	<p>I can identify an appropriate function type to construct a function model given a scenario.</p> <p>I can describe assumptions and restrictions related to building a function model.</p>	<ul style="list-style-type: none"> <li>● I can determine a linear function to model data that demonstrates a roughly constant rate of change.</li> <li>● I can determine a quadratic function to model data that demonstrates roughly linear rate of change.</li> <li>● I can determine a cubic function to model data regarding volume or three dimensions.</li> <li>● I can determine a polynomial to model scenarios with multiple real zeros or multiple maxima or minima.</li> <li>● I can determine a piecewise function to model contextual scenarios that demonstrate different characteristics over different intervals.</li> </ul>
14 Function Model Construction and Application	<p>I can construct a linear, quadratic, cubic, quartic, polynomial of degree <math>n</math>, or related piecewise-defined function model.</p> <p>I can construct a rational function model based on a context.</p> <p>I can apply a function model to answer questions about a data set or contextual scenario.</p>	<ul style="list-style-type: none"> <li>● I can use technology to determine a polynomial (linear, quadratic, cubic, or quartic) model to represent a set of data.</li> <li>● I can use a model to draw conclusions about a data set or contextual scenario.</li> </ul>

<b>Unit Title:</b>	
Exponential and Logarithmic Functions	
<b>Relevant Standards: Bold indicates priority</b>	
2.A; 2.B Students should learn to communicate differences and similarities among arithmetic sequences, linear functions, geometric sequences, and exponential functions. Students can develop a deeper understanding of these four function types by considering how each would be represented in a graph, in a table, in an analytical representation, and through verbal descriptions of related scenarios. Examining multiple representations is also powerful in understanding composition of functions and relationships between functions and their inverse functions. In this unit, multiple representations should be used to explore the inverse relationship between exponential and logarithmic functions.	
<b>Essential Question(s):</b>	<b>Enduring Understanding(s):</b>
<ul style="list-style-type: none"> <li>• How can I make a single model that merges the interest I earn from my bank with the taxes that are due so I can know how much I will have in the end?</li> <li>• How can we adjust the scale of distance for a model of planets in the solar system so the relationships among the planets are easier to see?</li> <li>• If different functions can be used to model data, how do we pick which one is best?</li> </ul>	In Unit 2, students build an understanding of exponential and logarithmic functions. Exponential and logarithmic function models are widespread in the natural and social sciences. When an aspect of a phenomenon changes proportionally to the existing amount, exponential and logarithmic models are employed to harness the information. Exponential functions are key to modeling population growth, radioactive decay, interest rates, and the amount of medication in a patient. Logarithmic functions are useful in modeling sound intensity and frequency, the magnitude of earthquakes, the pH scale in chemistry, and the working memory in humans. The study of these two function types touches careers in business, medicine, chemistry, physics, education, and human geography, among others.
<b>Demonstration of Learning:</b>	<b>Pacing for Unit</b>
Certified AP assessments and released items.	10 Weeks
<b>Family Overview (link below)</b>	<b>Integration of Technology:</b>
	<i>Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning</i>
<b>Unit-specific Vocabulary:</b>	
Sequence, Discrete, Arithmetic, Geometric, Common Difference, Constant Rate, Common ratio, Constant proportional change, Validate, Exponential, Logarithmic, Proportional Output Value, Logarithmically scaled, Semi-Log Plot, Residual, Linearization, Composition, Decomposition, Inverse	
<b>Differentiation through <a href="#">Universal Design for Learning</a></b>	
<b>UDL Indicator</b>	<b>Teacher Actions:</b>

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

<p><b>Related <i>CELP standards:</i></b></p>	<p><b>Learning Targets:</b></p>
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<p>An EL can construct grade appropriate oral and written claims and support them with reasoning and evidence.</p>	<p>All learning targets in this unit support CELP standard 9-12.</p>
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<p><b>Lesson Sequence</b></p>	<p><b>Learning Target</b></p>	<p><b>Success Criteria/ Assessment</b></p>
<p>1 Change in Arithmetic and Geometric Sequences</p>	<p>I can express arithmetic sequences found in mathematical and contextual scenarios as functions of the whole numbers. I can express geometric sequences found in mathematical and contextual scenarios as functions of the whole numbers.</p>	<ul style="list-style-type: none"> <li>● I can find a common difference of an arithmetic sequence and use it to write the equation for the sequence.</li> <li>● I can find a common ratio of a geometric sequence and use it to write the equation for the sequence.</li> </ul>
<p>2 Change in Linear and Exponential Functions</p>	<p>I can construct functions of the real numbers that are comparable to arithmetic and geometric sequences. I can describe similarities and differences between linear and exponential functions.</p>	<ul style="list-style-type: none"> <li>● I can write a linear function that is comparable to an arithmetic sequence.</li> <li>● I can write a linear function that is comparable to a geometric sequence.</li> <li>● I can determine if a function is linear or exponential from a table, graph or an equation by examining a rate of change.</li> </ul>
<p>3 Exponential Functions</p>	<p>I can identify key characteristics of exponential functions.</p>	<ul style="list-style-type: none"> <li>● I can find the initial value of an exponential function.</li> <li>● I can find the growth factor of an exponential function.</li> <li>● I can determine if an exponential function represents growth or decay given a table, graph or an equation.</li> <li>● I can use limit notation to describe the end behavior of an exponential function.</li> <li>● I can identify exponential functions that has been vertically translated.</li> </ul>
<p>4 Exponential Function Manipulatio</p>	<p>I can rewrite exponential expressions in equivalent forms.</p>	<ul style="list-style-type: none"> <li>● I can use the product property for exponents to rewrite an exponential expression.</li> <li>● I can use the power property for exponents to rewrite an exponential expression.</li> </ul>

n		<ul style="list-style-type: none"> <li>• I can use the negative exponent property for exponents to rewrite an exponential expression.</li> <li>• I can rewrite an exponential expression containing a rational exponent as a radical expression.</li> </ul>
5 Exponential Function Context and Data Modeling	<p>I can construct a model for situations involving proportional output values over equal length input value intervals.</p> <p>I can apply exponential models to answer questions about a data set or contextual scenario.</p>	<ul style="list-style-type: none"> <li>• I can use exponential functions to model growth patterns.</li> <li>• I can construct an exponential model from a ratio and initial value or given two input output pairs.</li> <li>• I can transform <math>f(x) = ab^x</math> to create an exponential model based on a scenario or data set.</li> <li>• I can use technology to determine exponential regression models.</li> <li>• I can rewrite an exponential function to determine growth rates over different intervals of time.</li> </ul>
6 Competing Function Model Validation	<p>I can construct linear, quadratic, and exponential models based on a data set.</p> <p>I can validate a model constructed from a data set.</p>	<ul style="list-style-type: none"> <li>• I can determine the most appropriate model (linear, quadratic or exponential) for a data set.</li> <li>• I can determine the residual of a data value.</li> <li>• I can validate a model by creating a residual plot.</li> </ul>
7 Composition of Functions	<p>I can evaluate the composition of two or more functions for given values.</p> <p>I can construct a representation of the composition of two or more functions.</p> <p>I can rewrite a given function as a composition of two or more functions.</p>	<ul style="list-style-type: none"> <li>• I can determine the composition of two functions.</li> <li>• I can calculate values of a composite function from tables, graphs or equations.</li> <li>• I can decompose a function into two or more less complicated functions.</li> </ul>
8 Inverse Functions	<p>I can determine the input-output pairs of the inverse of a function.</p> <p>I can determine the inverse of a function on an invertible domain.</p>	<ul style="list-style-type: none"> <li>• I can determine if a function is invertible from its graph.</li> <li>• I can determine an inverse function value given a table, graph or equation.</li> <li>• I can determine the equation of a function's inverse.</li> <li>• I can show that two functions are inverses of each other by composing them.</li> </ul>
9 Logarithmic Expressions	I can evaluate logarithmic expressions.	<ul style="list-style-type: none"> <li>• I can evaluate logarithmic expressions with or without the use of technology.</li> </ul>
10 Inverses of Exponential Functions	I can construct representations of the inverse of an exponential function with an initial value of 1.	<ul style="list-style-type: none"> <li>• I can show that logarithms and exponentials are inverses of each other.</li> </ul>
11. Logarithmic Functions	I can identify key characteristics of logarithmic functions.	<ul style="list-style-type: none"> <li>• I can determine the domain and range of logarithmic functions.</li> <li>• I can determine if a logarithmic function is increasing or decreasing.</li> <li>• I can determine the concavity of a logarithmic function.</li> <li>• I can determine the end behavior of a logarithmic function given a table, graph or an equation using</li> </ul>

		limit notation.
12 Logarithmic Function Manipulation	I can rewrite logarithmic expressions in equivalent forms.	<ul style="list-style-type: none"> <li>• I can use the product property for logarithms to rewrite a logarithmic expression.</li> <li>• I can use the power property for logarithms to rewrite a logarithmic expression.</li> <li>• I can use the change of base property for logarithms to rewrite a logarithmic expression.</li> </ul>
13 Exponential and Logarithmic Equations and Inequalities	<p>I can solve exponential and logarithmic equations and inequalities.</p> <p>I can construct the inverse function or exponential and logarithmic functions.</p>	<ul style="list-style-type: none"> <li>• I can use the properties of exponents and logarithms to solve exponential and logarithmic equations.</li> <li>• I can identify the extraneous solutions.</li> <li>• I can use the properties of exponents and logarithms to solve exponential and logarithmic inequalities.</li> <li>• I can determine the equation of the inverse of an exponential function that has been transformed.</li> <li>• I can determine the equation of the inverse of a logarithmic function that has been transformed.</li> </ul>
14 Logarithmic Function Context and Data Modeling	I can construct a logarithmic function model.	<ul style="list-style-type: none"> <li>• I can construct a logarithmic model from an appropriate proportion and real zero or from two input-output pairs.</li> <li>• I can transform the function <math>f(x) = a \cdot \log_b x</math> to create logarithmic function models based on a problem scenario or data set.</li> <li>• I can use technology to construct logarithmic function models</li> <li>• I can use logarithmic function models to predict values for the dependent variable.</li> </ul>
15 Semi-log Plots	<p>I can determine if an exponential model is appropriate by examining a semi-log plot of a data set.</p> <p>I can construct the linearization of exponential data.</p>	<ul style="list-style-type: none"> <li>• I can construct a semi-log plot.</li> <li>• I can determine if a function is exponential by analyzing a semi log plot.</li> <li>• I can model exponential data using a linear model.</li> </ul>

Unit Title:	
Trigonometric and Polar Functions	
Relevant Standards: <b>Bold indicates priority</b>	
1.A; 1.B; 1.C; 2.B; 3.A	
<p>Students should have multiple experiences transitioning among, and communicating about, the various representations of trigonometric functions, especially sinusoidal functions. It is important that, in addition to solving trigonometric equations and finding equivalent trigonometric expressions, students build sinusoidal models with and without technology and practice constructing different representations. As students transition to thinking in the polar plane, they will refine their communications related to characteristics of functions. The more casual language that students may have adopted such as “goes up” and “goes down” will need to be replaced with more careful language that addresses a function’s behavior related to angles and radii.</p>	
Essential Question(s):	Enduring Understanding(s):
<ul style="list-style-type: none"> <li>● Since energy usage goes up and down through the year, how can I use trends in data to predict my monthly electricity bills when I get my first apartment?</li> <li>● How do we model aspects of circular and spinning objects without using complex equations from the x-y rectangular-based coordinate system?</li> <li>● How does right triangle trigonometry from geometry relate to trigonometric functions?</li> </ul>	<p>In Unit 3, students explore trigonometric functions and their relation to the angles and arcs of a circle. Since their output values repeat with every full revolution around the circle, trigonometric functions are ideal for modeling periodic, or repeated pattern phenomena, such as: the highs and lows of a wave, the blood pressure produced by a heart, and the angle from the North Pole to the Sun year to year. Furthermore, periodicity is found in human inventions and social phenomena. For example, moving parts of an analog clock are modeled by a trigonometric function with respect to each other or with respect to time; traffic flow at an intersection over the course of a week demonstrates daily periodicity; and demand for a particular product over the course of a year falls into an annually repeating pattern. Polar functions, which are also explored in this unit, have deep ties to trigonometric functions as they are both based on the circle. Polar functions are defined on the polar coordinate system that uses the circular concepts of radii and angles to describe location instead of rectangular concepts of left-right and up-down, which students have worked with previously. Trigonometry serves as the bridge between the two systems.</p>
Demonstration of Learning:	Pacing for Unit
Certified AP assessments and released items.	10 Weeks
Family Overview (link below)	Integration of Technology:
	<i>Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning</i>

Unit-specific Vocabulary:		
Periodic, Secant, Cosecant, Reciprocal, Pole, Reflect, Tangent, Cotangent, Origin, Cosine (horizontal displacement), Sine (vertical displacement), Unit Circle, Identity, Rectangular, Cartesian, Polar, Angle $\theta$ , Radius, Directed distance, Terminal Ray		
Differentiation through <i>Universal Design for Learning</i>		
UDL Indicator	Teacher Actions:	
<b>Comprehension:</b> Highlight patterns, critical features, big ideas, and relationships	<ul style="list-style-type: none"> <li>● Highlight or emphasize key elements in text, graphics, diagrams, formulas</li> <li>● Use outlines, graphic organizers, unit organizer routines, concept organizer routines, and concept mastery routines to emphasize key ideas and relationships</li> <li>● Use multiple examples and non-examples to emphasize critical features</li> <li>● Use cues and prompts to draw attention to critical features</li> <li>● Highlight previously learned skills that can be used to solve unfamiliar problems</li> </ul>	
Supporting Multilingual/English Learners		
Related <i>CELP standards:</i>	Learning Targets:	
An EL can construct grade appropriate oral and written claims and support them with reasoning and evidence.	All learning targets in this unit support CELP standard 9-12.	
Lesson Sequence	Learning Target	Success Criteria
1 Periodic Phenomena	<p>I can construct graphs of periodic relationships based on verbal representations.</p> <p>I can describe key characteristics of a periodic function based on a verbal representation.</p>	<ul style="list-style-type: none"> <li>● I can identify a period behavior between two variables.</li> <li>● I can graph period function from the single cycle of the relationship based on a verbal description.</li> <li>● I can find a period of a period function.</li> </ul>
2 Sine, Cosine, and Tangent	I can determine the sine, cosine, and tangent of an angle using the unit circle.	<ul style="list-style-type: none"> <li>● I can name and draw angles in standard position.</li> <li>● I can find coterminal angles of an angle.</li> <li>● I can determine sine, cosine and tangent ratio on a unit circle.</li> <li>● I can represent angles using radian measure.</li> </ul>
3 Sine and Cosine Function Values	I can determine the coordinates of points on a circle centered at the origin.	<ul style="list-style-type: none"> <li>● I can identify points on a circle centered at the origin.</li> <li>● I can use a unit circle to find the exact values of sine and cosine of angles that are multiples of <math>\frac{\pi}{4}</math> and <math>\frac{\pi}{6}</math>.</li> </ul>

4 Sine and Cosine Function Graphs	I can construct representations of sine and cosine functions using the unit circle.	<ul style="list-style-type: none"> <li>• I can graph sine and cosine functions as functions of <math>\theta</math> using a unit circle.</li> <li>• I can determine the domain and range of a sine and cosine function.</li> </ul>
5 Sinusoidal Functions	I can identify key characteristics of the sine and cosine functions.	<ul style="list-style-type: none"> <li>• I can find a period of a sinusoidal function given an equation or a graph.</li> <li>• I can find an amplitude of a sinusoidal function given an equation or a graph.</li> <li>• I can find a midline of a sine and cosine function given an equation or a graph.</li> <li>• I can find the intervals of change in concavity for sinusoidal functions.</li> <li>• I can understand that the frequency of a sinusoidal function is a reciprocal of a period.</li> </ul>
6 Sinusoidal Transformations	I can identify the amplitude, vertical shift, period, and phase shift of a sinusoidal function.	<ul style="list-style-type: none"> <li>• I can identify a period and an amplitude of a sinusoidal function given an equation or a graph.</li> <li>• I can identify the vertical shift of a sinusoidal function given an equation or a graph.</li> <li>• I can identify a phase shift of a sinusoidal function given an equation or a graph.</li> <li>• I can write an equation of a sinusoidal function given a graph.</li> </ul>
7 Sinusoidal Function Context and Data Modeling	I can construct sinusoidal function models of periodic phenomena.	<ul style="list-style-type: none"> <li>• I can write a sinusoidal function modeling a contextual scenario using key points.</li> <li>• I can use sinusoidal regression to find a sinusoidal model or a data set.</li> <li>• I can use the sinusoidal model to answer questions about a contextual scenario.</li> </ul>
8 The Tangent Function	<p>I can construct representations of the tangent function using the unit circle.</p> <p>I can describe key characteristics of the tangent function.</p> <p>I can describe additive and multiplicative transformations involving the tangent function.</p>	<ul style="list-style-type: none"> <li>• I can define a tangent function on a unit circle.</li> <li>• I can find a period of a tangent function.</li> <li>• I can find the domain and range of a tangent function.</li> <li>• I can find the intervals of concavity of a tangent function given a graph.</li> <li>• I can graph a tangent function and its transformations.</li> </ul>
9 Inverse Trigonometric Functions	I can construct analytical and graphical representations of the inverse of the sine, cosine, and tangent functions over a restricted domain.	<ul style="list-style-type: none"> <li>• I can understand that restricted domain is necessary to find inverses of trigonometric functions.</li> <li>• I can evaluate the exact value of inverse trigonometric functions.</li> <li>• I can evaluate the value of inverse trigonometric functions using technology.</li> </ul>
10 Trigonometric Equations and	I can solve equations and inequalities involving trigonometric functions.	<ul style="list-style-type: none"> <li>• I can solve trigonometric equations on restricted and unrestricted domains.</li> <li>• I can solve trigonometric inequalities.</li> <li>• I can solve trigonometric equations and inequalities</li> </ul>

Inequalities		arising from contextual scenarios and apply appropriate domain restrictions for those scenarios.
11 The Secant, Cosecant, and Cotangent Functions	I can identify key characteristics of functions that involve quotients of the sine and cosine functions.	<ul style="list-style-type: none"> <li>• I can define secant, cosecant and cotangent functions.</li> <li>• I can graph secant, cosecant and cotangent functions.</li> <li>• I can find the domain and range of secant, cosecant and cotangent functions.</li> </ul>
12 Equivalent Representations of Trigonometric Functions	<p>I can rewrite trigonometric expressions in equivalent forms with the Pythagorean identity.</p> <p>I can rewrite trigonometric expressions in equivalent forms with sine and cosine sum identities.</p> <p>I can solve equations using equivalent analytic representations of trigonometric functions.</p>	<ul style="list-style-type: none"> <li>• I can use Pythagorean trigonometric identities to rewrite trigonometric expressions in equivalent forms.</li> <li>• I can use sum identities to rewrite trigonometric expressions in equivalent forms.</li> <li>• I can solve trigonometric equations and identities using trigonometric identities.</li> </ul>
13 Trigonometry and Polar Coordinates	I can determine the location of a point in the plane using both rectangular and polar coordinates.	<ul style="list-style-type: none"> <li>• I can plot points using polar coordinates</li> <li>• I can convert coordinates from polar to rectangular forms and vice versa.</li> <li>• I can represent complex numbers in a complex plane.</li> <li>• I can write complex numbers in trigonometric form.</li> </ul>
14 Polar function Graphs	I can construct graphs of polar functions.	<ul style="list-style-type: none"> <li>• I can create a table of input-output pairs of polar functions.</li> <li>• I can graph polar functions in the polar plane.</li> </ul>
15 Rates of Change in Polar Functions	I can describe characteristics of the graph of a polar function.	<ul style="list-style-type: none"> <li>• I can determine the intervals on which a polar function is positive and increasing or negative and decreasing and vice versa.</li> <li>• I can determine the intervals on which the distance between a polar function and the origin is increasing or decreasing.</li> <li>• I can find the relative extrema of a polar function.</li> <li>• I can find an average rate of change of <math>r</math> values over an interval of <math>\theta</math>.</li> <li>• I can use the average rate of change of <math>r</math> with respect to <math>\theta</math> to estimate values of the function on an interval.</li> </ul>

Course Title:	Content Area:	Grade Level:	Credit (if applicable)
ACC Grade 7 Mathematics: Bridge to Algebra	Mathematics	7	

### Course Description:

This accelerated mathematics course blends the priority content of grades 7 and 8 into one course. The Bridge course is aligned with the College and Career Ready Standards for seventh grade and eighth grade. In this course students develop a coherent understanding of grade level major works and build fluency with the real number system focusing on rational numbers. Students use linear equations to analyze, represent, and solve problems related to data distributions. They apply knowledge from previous mathematics courses to work in preparation for concepts that will begin in Algebra 1. Application is emphasized.

### Aligned Core Resources:

Kendall Hunt Illustrative Mathematics Workbook

### 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

Aligned Lessons	Standards
Acc6.5.9, Acc6.7.15, Acc6.7.19	7.EE.A
Acc6.6.1, Acc7.4.7, Acc7.4.8, Acc7.4.9, Acc7.4.10, Acc7.4.11	7.EE.A.1
Acc7.3.12	7.EE.A.2
Acc7.3.1, Acc6.7.14, Acc6.7.19	7.EE.B
Acc6.5.20, Acc6.7.17, Acc6.7.22, Acc7.3.2, Acc7.3.3, Acc7.3.4, Acc7.3.5, Acc7.3.6, Acc7.3.11, Acc7.3.12	7.EE.B.3
Acc6.7.19, Acc6.7.20, Acc7.3.1, Acc7.3.2, Acc7.3.3, Acc7.3.5, Acc7.3.9, Acc7.3.11, Acc7.3.12, Acc7.3.13, Acc7.4.5	7.EE.B.4
Acc6.7.16, Acc6.7.19, Acc6.7.20, Acc7.3.1, Acc7.3.4, Acc7.3.5, Acc7.3.6, Acc7.3.7, Acc7.3.8, Acc7.3.9, Acc7.3.10, Acc7.3.11, Acc7.3.12	7.EE.B.4.a
Acc7.4.4, Acc7.4.5, Acc7.4.6	7.EE.B.4.b
Acc7.8.11	8.EE.A

Acc7.8.1, Acc7.8.2, Acc7.8.3, Acc7.8.4, Acc7.8.8, Acc7.8.10	8.EE.A.2
Acc7.5.1, Acc7.5.3, Acc7.5.4, Acc7.5.5, Acc7.5.6, Acc7.5.7, Acc7.5.8, Acc7.5.9, Acc7.5.10	8.EE.B
Acc7.5.1, Acc7.5.3, Acc7.5.5	8.EE.B.5
Acc7.2.15, Acc7.2.16, Acc7.2.17, Acc7.5.6, Acc7.5.9, Acc7.5.25	8.EE.B.6
Acc7.4.12, Acc7.4.13, Acc7.4.17, Acc7.5.10, Acc7.5.11,	8.EE.C
Acc7.4.12, Acc7.4.13, Acc7.4.14, Acc7.4.17	8.EE.C.7
Acc7.4.15, Acc7.4.16	8.EE.C.7.a
Acc7.4.14	8.EE.C.7.b
Acc7.4.17, Acc7.5.11, Acc7.5.12, Acc7.5.13, Acc7.5.14, Acc7.5.15, Acc7.5.16	8.EE.C.8
Acc7.5.11, Acc7.5.13, Acc7.5.14, Acc7.5.25	8.EE.C.8.a
Acc7.5.13, Acc7.5.16,	8.EE.C.8.b
Acc7.5.16, Acc7.5.26	8.EE.C.8.c
Acc6.5.14, Acc6.5.20, Acc7.2.1, Acc7.2.2, Acc7.2.3, Acc7.2.4, Acc7.2.5, Acc7.2.6, Acc7.2.7, Acc7.2.18	7.G.A.1
Acc7.6.26, Acc6.5.11	7.G.A.2
Acc7.6.11, Acc7.6.15	7.G.A.3
Acc6.5.14, Acc7.6.17	7.G.B
Acc6.5.10	7.G.B.4
Acc6.5.10	7.G.B.4
Acc6.5.10, Acc6.5.12, Acc6.5.15, Acc6.5.19, Acc6.5.20	7.G.B.4
Acc7.3.13, Acc7.2.6, Acc7.2.12	7.G.B.5
Acc6.5.5, Acc6.5.14, Acc7.6.11, Acc7.6.14, Acc7.6.15, Acc7.6.16, Acc7.6.17, Acc7.6.26,	7.G.B.6
Acc7.1.18, Acc7.2.8, Acc7.2.9, Acc7.2.10, Acc7.2.16, Acc7.2.17	8.G.A
Acc7.1.1, Acc7.1.2, Acc7.1.3, Acc7.1.5, Acc7.1.10, Acc7.1.12, Acc7.2.13, Acc7.5.7	8.G.A.1
Acc7.1.6, Acc7.1.7, Acc7.1.8, Acc7.1.9, Acc7.1.11	8.G.A.1.a
Acc7.1.6, Acc7.1.7, Acc7.1.8, Acc7.1.9	8.G.A.1.b
Acc7.1.7, Acc7.1.8	8.G.A.1.c
Acc7.1.10, Acc7.1.11, Acc7.1.13, Acc7.2.11, Acc7.2.12	8.G.A.2
Acc7.1.4, Acc7.1.5, Acc7.2.10, Acc7.2.17	8.G.A.3
Acc7.2.11, Acc7.2.12, Acc7.2.19	8.G.A.4
Acc7.1.12, Acc7.1.13, Acc7.1.14, Acc7.2.13, Acc7.2.19,	8.G.A.5
Acc7.8.1, Acc7.8.5, Acc7.8.7,	8.G.B
Acc7.1.14, Acc7.8.1, Acc7.8.5, Acc7.8.6, Acc7.8.7	8.G.B.6
Acc7.8.5, Acc7.8.6, Acc7.8.8, Acc7.8.13	8.G.B.7
Acc7.8.9	8.G.B.8

Acc7.6.12, Acc7.6.13Acc7.6.21, Acc7.6.23, Acc7.6.24	8.G.C
Acc7.6.18, Acc7.6.19, Acc7.6.20, Acc7.6.21, Acc7.6.22, Acc7.6.23, Acc7.6.24, Acc7.6.25,	8.G.C.9
Acc6.7.18	7.NS.A
Acc6.7.6, Acc6.7.8, Acc6.7.9, Acc6.7.10	7.NS.A.1,,
Acc6.7.6, Acc6.7.7	7.NS.A.1.a
Acc6.7.6, Acc6.7.7	7.NS.A.1.b
Acc6.7.7, Acc6.7.9, Acc6.7.10	7.NS.A.1.c,
Acc6.7.7	7.NS.A.1.d
Acc6.7.14, Acc6.7.16,	7.NS.A.2
Acc6.7.14	7.NS.A.2.a
Acc6.7.16	7.NS.A.2.b
Acc6.7.14	7.NS.A.2.c
Acc6.7.10Acc6.7.17, Acc6.7.18, Acc6.7.19Acc6.7.20,	7.NS.A.3

## 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-Proportional Relationships \(ACC 6, Unit 5\)](#)

[Unit 2-Percentage Increase and Decrease \(ACC 6, Unit 6\)](#)

[Unit 3-Rational Numbers \(ACC 6 Unit 7\)](#)

[Unit 4-Writing and Solving Equations \(ACC 7, Unit 3\)](#)

[Unit 5-Inequalities, Expressions, and Equations \(ACC 7 Unit 4\)](#)

[Unit 6-Rigid Transformations and Congruence \(ACC 7, Unit 1\)](#)

[Unit 7-Scale Drawings, Similarity, and Slope \(ACC 7, Unit 2\)](#)

[Unit 8-Linear Relationships \(ACC 7, Unit 5\)](#)

[Unit 9-Functions and Volume \(ACC 7, Unit 6\)](#)

[Unit 10-Pythagorean Theorem and Irrational Numbers \(ACC 7, Unit 8\)](#)

[Course Assessment Map](#)

**Unit Title:**

Unit 1-Proportional Relationships (ACC 6, Unit 5)

**Relevant Standards: Bold indicates priority**

Lesson	Standard
Acc6.5.2	7.RP.A, 7.RP.A.2, 7.RP.A.2.b, 7.RP.A.2.c
Acc6.5.3	7.RP.A.2, 7.RP.A.2.c
Acc6.5.4	7.RP.A.1, 7.RP.A.2
Acc6.5.5	7.G.B.6, 7.RP.A.1, 7.RP.A.2
Acc6.5.6	7.RP.A, 7.RP.A.2
Acc6.5.7	7.RP.A, 7.RP.A.2, 7.RP.A.2.a
Acc6.5.8	7.RP.A.1, 7.RP.A.2
Acc6.5.9	7.EE.A, 7.RP.A.2
Acc6.5.10	7.G.B.4, 7.RP.A.2.a, 7.RP.A.3
Acc6.5.11	7.G.A, 7.G.A.2, 7.G.B.4
Acc6.5.12	7.G.B.4, 7.RP.A.2, 7.RP.A.2.a
Acc6.5.13	7.G.B.4
Acc6.5.14	7.G.A.1, 7.G.B, 7.G.B.6
Acc6.5.15	7.G.B.4, 7.RP.A.2.a
Acc6.5.16	7.G.B.4
Acc6.5.17	7.RP.A, 7.RP.A.2
Acc6.5.18	7.RP.A.2
Acc6.5.19	7.G.B.4
Acc6.5.20	7.EE.B.3, 7.G.A.1, 7.G.B.4

**Unit Narrative**

In this unit, students learn to understand and use the terms “proportional,” “constant of proportionality,” and “proportional relationship,” and recognize when a relationship is or is not proportional. They represent proportional relationships with tables, equations, and graphs. Students use these terms and representations in reasoning about situations that involve constant speed, unit pricing, and measurement conversions. Then, special focus is given to circumference and area of circles as examples of proportional and nonproportional relationships, respectively. Students informally derive the formulas for circumference and area of a circle and are introduced to the value  $\pi$ .

<b>Demonstration of Learning:</b>		<b>Pacing for Unit</b>
CFA 1: Lesson 3 CFA 2: Lesson 7 CFA 3: Lesson 16 EoU: Version B		18 Days
<b>Family Overview (link below)</b>		<b>Integration of Technology:</b>
<a href="#">Proportional Relationships</a>		<i>Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning</i>
<b>Unit-specific Vocabulary:</b>		<b>Aligned Unit Materials, Resources, and Technology (beyond core resources):</b>
Area, base, circle, coefficient, compose, constant of proportionality, coordinate plane, cubed, decompose, dependent variable, diameter, double number line, equivalent expressions, equivalent ratios, exponent, face, height, independent variable, long division, net, opposite vertex, origin, parallelogram, per, percent, percentage, pi, polygon, polyhedron, prism, proportional relationship, pyramid, quadrilateral, radius, ratio,		DESMOS Edulastic
<b>Connections to Prior Units:</b>		<b>Connections to Future Units:</b>
ACC 6, Unit 1; ACC 6, Unit 4		ACC 6, Unit 6
<b>Differentiation through <a href="#">Universal Design for Learning</a></b>		
<b>UDL Indicator</b>		<b>Teacher Actions:</b>
<b>Comprehension:</b> Highlight patterns, critical features, big ideas, and relationships		<ul style="list-style-type: none"> <li>● Highlight or emphasize key elements in text, graphics, diagrams, formulas</li> <li>● Use multiple examples and non-examples to emphasize critical features</li> <li>● Use cues and prompts to draw attention to critical features</li> <li>● Highlight previously learned skills that can be used to solve unfamiliar problems</li> </ul>
<b>Supporting Multilingual/English Learners</b>		
<b>Related <a href="#">CELP standards:</a></b>		<b>Learning Targets:</b>
An ML can construct grade appropriate oral and written claims and support them with reasoning and evidence.		All targets apply and require reasoning with evidence.
<b>Lesson Sequence</b>	<b>Learning Target</b>	<b>Success Criteria/ Assessment/Resources</b>

<p>1 (lessons 1-3)</p>	<p>I can compare approaches to solving problems involving proportional relationships.</p>	<ul style="list-style-type: none"> <li>● I can write an equation of the form <math>y=kx</math> to represent a proportional relationship described by a table or a story.</li> <li>● I can write the constant of proportionality as an entry in a table.</li> <li>● I can find two constants of proportionality for a proportional relationship.</li> <li>● I can write two equations representing a proportional relationship described by a table or story.</li> <li>● I can find missing information in a proportional relationship using the constant of proportionality.</li> <li>● I can relate all parts of an equation like <math>y=kx</math> to the situation it represents.</li> </ul>
<p>2 (lessons 4-6)</p>	<p>I can compare proportional relationships to nonproportional relationships. (Lessons 4-5)</p> <p>I can identify the relationship between variables in a given situation as proportional. (Lesson 6)</p>	<ul style="list-style-type: none"> <li>● I can decide if a relationship represented by a table could be proportional and when it is definitely not proportional.</li> <li>● I can decide if a relationship represented by an equation is proportional or not.</li> <li>● I can ask questions about a situation to determine whether two quantities are in a proportional relationship.</li> <li>● I can solve all kinds of problems involving proportional relationships.</li> </ul>
<p>3 (lessons 7-9)</p>	<p>I can compare descriptions, tables, equations, and graphs representing the same situations.</p> <p>I can compare graphs of proportional relationships.</p>	<ul style="list-style-type: none"> <li>● I can find the constant of proportionality from a graph.</li> <li>● I know that the graph of a proportional relationship lies on a line through <math>(0,0)</math>.</li> <li>● I can compare two, related proportional relationships based on their graphs.</li> <li>● I know that the steeper graph of two proportional relationships has a larger constant of proportionality.</li> <li>● I can interpret a graph of a proportional relationship using the situation.</li> <li>● I can write an equation representing a proportional relationship from a graph.</li> </ul>

<p>4 (lessons 10-13)</p>	<p>I can describe the relationships between circumference and diameter that are always true. (Lessons 10-13)</p>	<ul style="list-style-type: none"> <li>● I can examine quotients and use a graph to decide whether two associated quantities are in a proportional relationship.</li> <li>● I understand that it can be difficult to measure the quantities in a proportional relationship accurately.</li> <li>● I can describe the characteristics that make a shape a circle.</li> <li>● I can identify the diameter, center, radius, and circumference of a circle.</li> <li>● I can describe the relationship between circumference and diameter of any circle.</li> <li>● I can explain what pi means/represents.</li> <li>● I can choose an approximation for pi based on the situation or problem.</li> <li>● If I know the radius, diameter, or circumference of a circle, I can find the other two.</li> </ul>
<p>5 (lessons 15-16) *SKIP lesson 14</p>	<p>I can compare the relationships of diameters and circumferences to diameters and areas. (lesson 15)</p> <p>I can justify reasoning about areas of curved figures. (lesson 16)</p>	<ul style="list-style-type: none"> <li>● I know the formula for the area of a circle.</li> <li>● I know whether or not the relationship between the diameter and area of a circle is proportional and can explain how I know.</li> <li>● I can calculate the area of more complicated shapes that include fractions of circles.</li> <li>● I can write exact answers in terms of pi.</li> </ul>
<p>6 (lessons 17-20) *SKIP lesson 19</p>	<p>I can justify whether or not a relationship is proportional. (lesson 17-18)</p> <p>I can justify my understanding of area and circumference of circles to solve more complicated real world problems. (lesson 20)</p>	<ul style="list-style-type: none"> <li>● I can make connections between the graphs, tables, and equations of a proportional relationship.</li> <li>● I can use units to help me understand information about proportional relationships.</li> <li>● I can answer a question by representing a situation using proportional relationships.</li> <li>● I can decide whether a situation about a circle has to do with area or circumference.</li> <li>● I can use formulas for circumference and area of a circle to solve problems.</li> <li>● I can apply my understanding of area and circumference of circles to solve more complicated problems.</li> </ul>

**Unit Title:**

Unit 2-Percentage Increase and Decrease (ACC 6, Unit 6)

**Relevant Standards: Bold indicates priority**

Lesson	Standards
Acc6.6.1	7.EE.A.1, 7.RP.A.2, 7.RP.A.3
Acc6.6.2	7.NS.A.2.d, 7.RP.A.2, 7.RP.A.3
Acc6.6.3	7.RP.A.3
Acc6.6.4	7.RP.A.3
Acc6.6.5	7.RP.A.3
Acc6.6.6	7.RP.A.3
Acc6.6.7	7.RP.A.3
Acc6.6.8	7.RP.A.3
Acc6.6.9	7.RP.A.3
Acc6.6.10	7.RP.A.3
Acc6.6.11	7.RP.A.3
Acc6.6.12	7.RP.A.3

**Demonstration of Learning:**

CFA 1: Lesson 4  
 CFA 2: Lesson 8  
 CFA 3: Lesson 10  
 EoU: Version A

**Pacing for Unit****Family Overview (link below)**

[Percentage Increase and Decrease](#)

**Integration of Technology:**

*Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning*

**Unit-specific Vocabulary:**

Area, base, (triangle), base (prism), circle, circumference, coefficient, compose, constant of proportionality, coordinate plane, cubed, decompose, dependent variable, diameter, double number line diagram, equivalent expressions, equivalent ratios, exponent,

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

DESMOS  
 Edulastic

face, height, independent variable, long division, measurement error, net, opposite vertex, origin, parallelogram, perpercent, percent error, percentage, percentage decrease, percentage increase, pi, polygon, polyhedron, prism, proportional relationship, pyramid, quadrilateral, radius, ratio, reciprocal, region, repeating decimal, same rate, solution to an equation, squared, surface area, table, tape diagram, term, unit price, unit rate, variable		
<b>Connections to Prior Units:</b>		<b>Connections to Future Units:</b>
ACC 6, Unit 5		ACC 6, Unit 8
<b>Differentiation through <i>Universal Design for Learning</i></b>		
<b>UDL Indicator</b>		<b>Teacher Actions:</b>
<b>Comprehension:</b> Highlight patterns, critical features, big ideas, and relationships		<ul style="list-style-type: none"> <li>● Highlight or emphasize key elements in text, graphics, diagrams, formulas</li> <li>● Use multiple examples and non-examples to emphasize critical features</li> <li>● Use cues and prompts to draw attention to critical features</li> <li>● Highlight previously learned skills that can be used to solve unfamiliar problems</li> </ul>
<b>Supporting Multilingual/English Learners</b>		
<b>Related <i>CELP standards:</i></b>		<b>Learning Targets:</b>
An ML can construct grade appropriate oral and written claims and support them with reasoning and evidence.		All italicized targets and their related success criteria.
<b>Lesson Sequence</b>	<b>Learning Target</b>	<b>Success Criteria/Assessment/Resources</b>
1 (lessons 1-2)	<i>I can generate an algebraic expression that represents a situation involving adding or subtracting a fraction or a decimal of the initial value.</i>	<ul style="list-style-type: none"> <li>● I can use the distributive property to rewrite an expression like <math>x + \frac{1}{2}x</math> as <math>(1 + \frac{1}{2})x</math>.</li> <li>● I understand that “half as much again” and “multiply by <math>\frac{3}{2}</math>” mean the same thing.</li> <li>● I can use the distributive property to rewrite an equation like <math>x + 0.5x = 1.5x</math>.</li> <li>● I can write fractions as decimals.</li> <li>● I understand that “half as much again” and “multiply by 1.5” mean the same thing.</li> </ul>
2 (Lessons)	I can calculate and explain percent change problems (Lesson 3).	<ul style="list-style-type: none"> <li>● I can draw a tape diagram that represents a percent increase or decrease (L3).</li> </ul>

<p>3-6)</p>	<p><i>I can interpret concrete problems involving percent increase and decrease (Lesson 4).</i></p> <p><i>I can represent situations involving percent increase and decrease (Lesson 5-6).</i></p>	<ul style="list-style-type: none"> <li>● When I know the starting amount and the percent increase or decrease, I can find the new amount. (L3)</li> <li>● I can use a double number line diagram to help me solve percent increase and decrease problems. (4)</li> <li>● I understand that if I know how much a quantity has grown, then the original amount represents 100%. (4)</li> <li>● When I know the new amount and the percentage of increase or decrease, I can find the original amount. (4)</li> <li>● I can solve percent increase and decrease problems by writing an equation to represent the situation and solving it. (5)</li> <li>● I can find percentages of quantities like 12.5% and 0.4%. (6)</li> <li>● I understand that to find 0.1% of an amount I have to multiply by 0.001. (6)</li> </ul>
<p>3 (Lessons 7-11)</p>	<p><i>I can calculate and interpret real world situations using percent increase and decrease. (L7-8)</i></p> <p><i>I can use percentages to describe situations that involve error. (L9-11)</i></p>	<ul style="list-style-type: none"> <li>● I understand and can solve problems about sales tax and tip. (L7)</li> <li>● I can find the percentage increase or decrease when I know the original amount and the new amount. (L8)</li> <li>● I understand and can solve problems about commission, interest, markups, and discounts. (L8)</li> <li>● I can represent measurement error as a percentage of the correct measurement.</li> <li>● I understand that all measurements include some error.</li> <li>● I can solve problems that involve percent error.</li> <li>● I can find a range of possible values for a quantity if I know the maximum percent error and the correct value.</li> </ul>

**Unit Title:**

Unit 3-Rational Numbers (ACC 6 Unit 7)

**Relevant Standards: Bold indicates priority**

<b>Lesson</b>	<b>Standards</b>
Acc6.7.1	6.NS.C.5, 6.NS.C.6, 7.NS.A.1
Acc6.7.2	6.NS.C.7.a, 6.NS.C.7.b, 6.NS.C.7.d
Acc6.7.3	6.NS.C, 6.NS.C.5, 6.NS.C.6, 6.NS.C.6.a, 6.NS.C.7
Acc6.7.4	6.NS.C.7, 6.NS.C.7.c, 6.NS.C.7.d
Acc6.7.5	6.NS.C.6, 6.NS.C.6.a, 6.NS.C.7, 6.NS.C.7.d
Acc6.7.6	7.NS.A.1, 7.NS.A.1.a, 7.NS.A.1.b
Acc6.7.7	7.NS.A.1.a, 7.NS.A.1.b, 7.NS.A.1.c, 7.NS.A.1.d
Acc6.7.8	7.NS.A.1
Acc6.7.9	7.NS.A.1, 7.NS.A.1.c
Acc6.7.10	7.NS.A.1, 7.NS.A.1.c, 7.NS.A.3
Acc6.7.11	6.NS.C.6, 6.NS.C.6.b, 6.NS.C.6.c, 6.NS.C.8
Acc6.7.12	6.NS.C.6.c, 6.NS.C.7.c, 6.NS.C.8
Acc6.7.13	6.G.A.3, 6.NS.C.6, 6.NS.C.6.b, 6.NS.C.6.c, 6.NS.C.8
Acc6.7.14	7.NS.A.2.a, 7.RP.A
Acc6.7.15	7.EE.B, 7.NS.A.2.c
Acc6.7.16	7.EE.B.4.a, 7.NS.A.2, 7.NS.A.2.b
Acc6.7.17	7.EE.B.3, 7.NS.A.3, 7.RP.A.2
Acc6.7.18	7.NS.A, 7.NS.A.3
Acc6.7.19	7.EE.B, 7.EE.B.4, 7.EE.B.4.a, 7.NS.A.3
Acc6.7.20	7.EE.B.4.a, 7.NS.A.3
Acc6.7.21	6.G.A.3, 6.NS.C.8
Acc6.7.22	7.EE.B.3, 7.NS.A.3

**Demonstration of Learning:**

CFA 1: Lesson 9  
 CFA 2: Lesson 16  
 CFA 3: Lesson 20

**Pacing for Unit**

EoU: Version B, remove question 6		
<b>Family Overview (link below)</b>		<b>Integration of Technology:</b>
<a href="#">Rational Numbers</a>		<i>Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning</i>
<b>Unit-specific Vocabulary:</b>		<b>Aligned Unit Materials, Resources, and Technology (beyond core resources):</b>
Absolute value, area, base, (triangle), base (prism), circle, circumference, coefficient, compose, constant of proportionality, coordinate plane, cubed, decompose, dependent variable, deposit, diameter, double number line diagram, equivalent expressions, equivalent ratios, exponent, face, height, independent variable, long division, measurement error, net, opposite vertex, origin, parallelogram, percent, percent error, percentage, percentage decrease, percentage increase, pi, polygon, polyhedron, prism, proportional relationship, pyramid, quadrant, quadrilateral, radius, ratio, rational number, reciprocal, region, repeating decimal, same rate, sign, solution to an equation, squared, surface area, table, tape diagram, term, unit price, unit rate, variable, withdrawal		DESMOS Edulastic
<b>Connections to Prior Units:</b>		<b>Connections to Future Units:</b>
ACC 6, Unit 4		ACC 7, Unit 3
<b>Differentiation through <a href="#">Universal Design for Learning</a></b>		
<b>UDL Indicator</b>		<b>Teacher Actions:</b>
<b>Comprehension:</b> Highlight patterns, critical features, big ideas, and relationships		<ul style="list-style-type: none"> <li>● Highlight or emphasize key elements in text, graphics, diagrams, formulas</li> <li>● Use multiple examples and non-examples to emphasize critical features</li> <li>● Use cues and prompts to draw attention to critical features</li> <li>● Highlight previously learned skills that can be used to solve unfamiliar problems</li> </ul>
<b>Supporting Multilingual/English Learners</b>		
<b>Related <a href="#">CELP standards:</a></b>		<b>Learning Targets:</b>
An ML can construct grade appropriate oral and written claims and support them with reasoning and evidence.		All italicized targets and their related success criteria.
<b>Lesson Sequence</b>	<b>Learning Target</b>	<b>Success Criteria/Assessment/Resources</b>

<p>1 (Lesson 1 ONLY)</p> <p><b>SKIP Lessons 2-5</b></p>	<p><i>I can describe and interpret signed numbers.</i></p>	<ul style="list-style-type: none"> <li>● I can explain what 0, positive numbers, and negative numbers mean in the context of temperature and elevation.</li> <li>● I can use positive and negative numbers to describe temperature and elevation.</li> <li>● I know what positive and negative numbers are.</li> </ul>
<p>2 (Lessons 6-10)</p>	<p><i>I can model and compute addition and subtraction situations that involve signed numbers.</i></p>	<ul style="list-style-type: none"> <li>● I can use a number line to add positive and negative numbers.</li> <li>● I understand how to add positive and negative numbers in general.</li> <li>● I understand what positive and negative numbers mean in a situation involving money.</li> <li>● I can explain the relationship between addition and subtraction of rational numbers.</li> <li>● I can use a number line to subtract positive and negative numbers.</li> <li>● I can find the difference between two rational numbers.</li> <li>● I can solve problems that involve adding and subtracting rational numbers.</li> <li>● I understand how to subtract positive and negative numbers in general.</li> </ul>
<p><b>*SKIP lessons 11-13</b></p>		
<p>3 (Lessons 14-17)</p>	<p><i>I can model and compute multiplication and division situations that involve signed numbers.</i></p>	<ul style="list-style-type: none"> <li>● I can explain what it means when time is represented with a negative number in a situation about speed and direction.</li> <li>● I can multiply two negative numbers.</li> <li>● I can use rational numbers to represent speed and direction.</li> <li>● I can solve problems that involve multiplying rational numbers.</li> <li>● I can divide rational numbers.</li> <li>● I can solve problems that involve multiplying and dividing rational numbers.</li> <li>● I can solve problems that involve negative rates.</li> </ul>

4 (Lessons 18-20)	<i>I can use rational numbers to write and solve equations that describe real world situations.</i>	<ul style="list-style-type: none"><li>● I can add, subtract, multiply, and divide rational numbers.</li><li>● I can evaluate expressions that involve rational numbers.</li><li>● I can solve equations that include rational numbers and have rational solutions.</li><li>● I can explain what the solution to an equation means for the situation.</li><li>● I can write and solve equations to represent situations that involve rational numbers.</li></ul>
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**Unit Title:**

Unit 4-Writing and Solving Equations (ACC 7, Unit 3)

**Relevant Standards: Bold indicates priority**

Lesson	Standards
Acc7.3.1	7.EE.B, 7.EE.B.4, 7.EE.B.4.a
Acc7.3.2	7.EE.B.3, 7.EE.B.4
Acc7.3.3	7.EE.B.3, 7.EE.B.4
Acc7.3.4	7.EE.B.3, 7.EE.B.4.a
Acc7.3.5	7.EE.B.3, 7.EE.B.4, 7.EE.B.4.a
Acc7.3.6	7.EE.B.3, 7.EE.B.4.a
Acc7.3.7	7.EE.B.4.a
Acc7.3.8	7.EE.B.4.a
Acc7.3.9	7.EE.B.4, 7.EE.B.4.a
Acc7.3.10	7.EE.B.4.a
Acc7.3.11	7.EE.B.3, 7.EE.B.4, 7.EE.B.4.a
Acc7.3.12	7.EE.A.2, 7.EE.B.3, 7.EE.B.4, 7.EE.B.4.a
Acc7.3.13	7.EE.B.4, 7.G.B.5

**Demonstration of Learning:**

CFA 1: Lesson 6  
 CFA 2: Lesson 9  
 CFA 3: Lesson 11  
 EOU: Assessment A

**Pacing for Unit****Family Overview (link below)**

[Writing and Solving Equations](#)

**Integration of Technology:**

*Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning*

**Unit-specific Vocabulary:**

Alternate interior angles, center of a dilation, clockwise, complementary, congruent, coordinate plane, corresponding, counterclockwise, dilation, equivalent

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

expressions, image, reflection, right angle, rigid transformation, rotation, scale, scale drawing, scale factor, scaled copy, sequence of transformations, similar, slope, straight angle, supplementary, tessellation, transformation, translation, transversal, vertex, vertical angles		
<b>Connections to Prior Units:</b>		<b>Connections to Future Units:</b>
Acc6.4 Acc6.7		Acc7.4
<b>Differentiation through <i>Universal Design for Learning</i></b>		
<b>UDL Indicator</b>		<b>Teacher Actions:</b>
<b>Comprehension:</b> Highlight patterns, critical features, big ideas, and relationships		<ul style="list-style-type: none"> <li>● Highlight or emphasize key elements in text, graphics, diagrams, formulas</li> <li>● Use multiple examples and non-examples to emphasize critical features</li> <li>● Use cues and prompts to draw attention to critical features</li> <li>● Highlight previously learned skills that can be used to solve unfamiliar problems</li> </ul>
<b>Supporting Multilingual/English Learners</b>		
<b>Related <i>CELP standards:</i></b>		<b>Learning Targets:</b>
An ML can . . . construct grade level appropriate oral and written claims and support them with reasoning and evidence.		All targets apply and require reasoning with evidence.
<b>Lesson Sequence</b>	<b>Learning Target</b>	<b>Success Criteria</b>
1 (Lessons 1-6)	<ul style="list-style-type: none"> <li>● I can interpret non-proportional situations with constant rates of change (Lesson 1)</li> <li>● I can compare stories with multiple representations (Lessons 2 and 3)</li> <li>● I can interpret solutions to equations (Lesson 4 and 5)</li> </ul>	<ul style="list-style-type: none"> <li>● I can think of ways to solve some more complicated word problems.</li> <li>● I can explain how a tape diagram represents parts of a situation and relationships between them.</li> <li>● I can use a tape diagram to find an unknown amount in a situation.</li> <li>● I can match equations and tape diagrams that represent the same situation.</li> <li>● If I have an equation, I can draw a tape diagram that shows the same relationship.</li> <li>● I can draw a tape diagram to represent a situation where there is a known amount and</li> </ul>

		<p>several copies of an unknown amount and explain what the parts of the diagram represent.</p> <ul style="list-style-type: none"> <li>● I can find a solution to an equation by reasoning about a tape diagram or about what value would make the equation true.</li> <li>● I can draw a tape diagram to represent a situation where there is more than one copy of the same sum and explain what the parts of the diagram represent.</li> <li>● I can find a solution to an equation by reasoning about a tape diagram or about what value would make the equation true.</li> <li>● I understand the similarities and differences between the two main types of equations we are studying in this unit.</li> <li>● When I have a situation or a tape diagram, I can represent it with an equation.</li> </ul>
<p>2 (Lessons 7-13)</p>	<ul style="list-style-type: none"> <li>● I can explain and compare strategies for solving equations with multiple representations (Lessons 8, 9, and 10)</li> <li>● I can interpret non-proportional situations with constant rates of change using equations and other representations (Lesson 11 and 12)</li> <li>● I can interpret equations involving angle relationships and solve for unknown angle measurements (Lesson 13)</li> </ul>	<ul style="list-style-type: none"> <li>● I can explain how a balanced hanger and an equation represent the same situation.</li> <li>● I can find an unknown weight on a hanger diagram and solve an equation that represents the diagram.</li> <li>● I can write an equation that describes the weights on a balanced hanger.</li> <li>● I can explain how a balanced hanger and an equation represent the same situation.</li> <li>● I can explain why some balanced hangers can be described by two different equations, one with parentheses and one without.</li> <li>● I can find an unknown weight on a hanger diagram and solve an equation that represents the diagram.</li> <li>● I can write an equation that describes the weights on a balanced hanger.</li> <li>● I can use the idea of doing the same to each side to solve equations that have negative numbers or solutions.</li> <li>● "For an equation like <math>3(x+2)=15</math>, I can solve it in two different ways: by first dividing each side by 3, or by first rewriting <math>3(x+2)</math> using the distributive property.</li> </ul>

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|  |  | <ul style="list-style-type: none"><li>●For equations with more than one way to solve, I can choose the easier way depending on the numbers in the equation."</li><li>●I can solve story problems by drawing and reasoning about a tape diagram or by writing and solving an equation.</li><li>●I can solve story problems about percent increase or decrease by drawing and reasoning about a tape diagram or by writing and solving an equation.</li><li>●I can write an equation to represent a relationship between angle measures and solve the equation to find unknown angle measures.</li></ul> |
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**Unit Title:**

Unit 5-Inequalities, Expressions, and Equations (ACC 7 Unit 4)

**Relevant Standards: Bold indicates priority**

Lesson	Standards
Acc7.4.1	6.EE.B.6, 6.EE.B.8, 6.NS.C.7.b
Acc7.4.2	6.EE.B.5, 6.EE.B.8, 6.NS.C.7.a
Acc7.4.3	6.EE.A.2.b, 6.EE.B.5, 6.EE.B.6, 6.EE.B.8
Acc7.4.4	7.EE.B.4.b
Acc7.4.5	7.EE.B.4, 7.EE.B.4.b
Acc7.4.6	7.EE.B.4.b
Acc7.4.7	7.EE.A.1, 7.NS.A.1, 7.NS.A.1.c
Acc7.4.8	7.EE.A.1
Acc7.4.9	7.EE.A.1
Acc7.4.10	7.EE.A.1
Acc7.4.11	7.EE.A.1
Acc7.4.12	8.EE.C, 8.EE.C.7
Acc7.4.13	8.EE.C, 8.EE.C.7
Acc7.4.14	8.EE.C.7, 8.EE.C.7.b
Acc7.4.15	8.EE.C.7.a
Acc7.4.16	8.EE.C.7.a
Acc7.4.17	8.EE.C, 8.EE.C.7, 8.EE.C.8

**Demonstration of Learning:**

CFA 1: Lesson 4  
 CFA 2: Lesson 9  
 CFA 3: Lesson 13  
 EOU: Assessment B

**Pacing for Unit****Family Overview (link below)**

[Inequalities, Expressions, and Equations](#)

**Integration of Technology:**

*Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning*

<b>Unit-specific Vocabulary:</b>		<b>Aligned Unit Materials, Resources, and Technology (beyond core resources):</b>
Alternate interior angles, center of a dilation, clockwise, coefficient, complementary, congruent, constant term, coordinate plane, corresponding, counterclockwise, dilation, equivalent expressions, expand, factor (an expressions), image, reflection, right angle, rigid transformation, rotation, scale, scale drawing, scale factor, scaled copy, sequence of transformations, similar, slope, solution to inequality, straight angle, supplementary, term, tessellation, transformation, translation, transversal, vertex, vertical angles		<ul style="list-style-type: none"> <li>●DESMOS</li> <li>●Edulastic</li> </ul>
<b>Connections to Prior Units:</b>		<b>Connections to Future Units:</b>
ACC 7, Unit 3		ACC 7, Unit 5
<b>Differentiation through <a href="#">Universal Design for Learning</a></b>		
<b>UDL Indicator</b>		<b>Teacher Actions:</b>
<b>Comprehension:</b> Highlight patterns, critical features, big ideas, and relationships		<ul style="list-style-type: none"> <li>●Highlight or emphasize key elements in text, graphics, diagrams, formulas</li> <li>●Use multiple examples and non-examples to emphasize critical features</li> <li>●Use cues and prompts to draw attention to critical features</li> <li>●Highlight previously learned skills that can be used to solve unfamiliar problems</li> </ul>
<b>Supporting Multilingual/English Learners</b>		
<b>Related <a href="#">CELP standards:</a></b>		<b>Learning Targets:</b>
An ML can construct grade appropriate oral and written claims and support them with reasoning and evidence.		All targets apply as they require mathematical reasoning with evidence.
<b>Lesson Sequence</b>	<b>Learning Target</b>	<b>Success Criteria</b>
1 (Lessons 1-6)	<ul style="list-style-type: none"> <li>●I can justify reasoning about solutions to inequalities (Lesson 2-5)</li> <li>●I can critique the reasoning of others using multiple representations (Lesson 3)</li> <li>●I can justify the need for specific information in order to write and solve inequalities (Lesson 6)</li> </ul>	<ul style="list-style-type: none"> <li>●I can graph inequalities on a number line.</li> <li>●I can write an inequality to represent a situation.</li> <li>●I can determine if a particular number is a solution to an inequality.</li> <li>●I can explain what it means for a number to be a solution to an inequality.</li> <li>●I can graph the solutions to an inequality on a number line.</li> </ul>

		<ul style="list-style-type: none"> <li>● I can explain what the solution to an inequality means in a situation.</li> <li>● I can write inequalities that involves more than one variable.</li> <li>● I can describe the solutions to a inequality by solving a related equation and then reasoning about values that make the inequality true.</li> <li>● I can write an inequality to represent a situation.</li> <li>● I can graph the solutions to an inequality on a number line.</li> <li>● I can solve inequalities by solving a related equation and then checking which values are solutions to the original inequality.</li> <li>● I can use what I know about inequalities to solve real-world problems.</li> </ul>
<p style="text-align: center;">2 (Lessons 7-11)</p>	<ul style="list-style-type: none"> <li>● I can justify reasoning about the distributive property (Lesson 7 and 8)</li> <li>● I can generalize about when expressions are equivalent (Lesson 9)</li> <li>● I can critique reasoning about equivalent expressions (Lesson 10)</li> </ul>	<ul style="list-style-type: none"> <li>● I can organize my work when I use the distributive property.</li> <li>● I can rewrite subtraction as adding the opposite and then rearrange terms in an expression.</li> <li>● I can organize my work when I use the distributive property.</li> <li>● I can use the distributive property to rewrite expressions with positive and negative numbers.</li> <li>● I understand that factoring and expanding are words used to describe using the distributive property to write equivalent expressions.</li> <li>● I can figure out whether two expressions are equivalent to each other.</li> <li>● When possible, I can write an equivalent expression that has fewer terms.</li> <li>● I am aware of some common pitfalls when writing equivalent expressions, and I can avoid them.</li> <li>● When possible, I can write an equivalent expression that has fewer terms.</li> <li>● Given an expression, I can use various strategies to write an equivalent expression.</li> <li>● When I look at an expression, I can notice if some parts have common factors and make the expression shorter by combining those parts.</li> </ul>

<p>3 (Lessons 12-17)</p>	<ul style="list-style-type: none"><li>● I can critique reasoning about maintaining balance in equations (Lesson 12)</li><li>● I can critique solutions of linear equations (Lesson 13)</li><li>● I can generalize about the structures of equations that have one, infinite, and no solutions (Lessons 14-16)</li></ul>	<ul style="list-style-type: none"><li>● I can add, subtract, multiply, or divide each side of an equation by the same expression to get a new equation with the same solution.</li><li>● I can make sense of multiple ways to solve an equation.</li><li>● I can solve linear equations in one variable.</li><li>● I can determine whether an equation has no solutions, one solution, or infinitely many solutions.</li><li>● I can solve equations with different numbers of solutions.</li><li>● I can use an expression to find when two things, like height, are the same in a real-world situation.</li></ul>
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**Unit Title:**

Unit 6-Rigid Transformations and Congruence (ACC 7, Unit 1)

**Relevant Standards: Bold indicates priority**

Lesson	Standards
Acc7.1.1	8.G.A.1
Acc7.1.2	8.G.A.1
Acc7.1.3	8.G.A.1
Acc7.1.4	8.G.A.3
Acc7.1.5	8.G.A.1, 8.G.A.3
Acc7.1.6	8.G.A.1.a, 8.G.A.1.b
Acc7.1.7	8.G.A.1.a, 8.G.A.1.b, 8.G.A.1.c
Acc7.1.8	8.G.A.1.a, 8.G.A.1.b, 8.G.A.1.c
Acc7.1.9	8.G.A.1.a, 8.G.A.1.b
Acc7.1.10	8.G.A.1, 8.G.A.2
Acc7.1.11	8.G.A.1.a, 8.G.A.2
Acc7.1.12	7.G.B.5, 8.G.A.1, 8.G.A.5
Acc7.1.13	8.G.A.2, 8.G.A.5
Acc7.1.14	8.G.A.5, 8.G.B.6
Acc7.1.18	8.G.A

**Demonstration of Learning:**

CFA 1: Lesson 3  
 CFA2: Lesson 6  
 MoU: Assessment (B)  
 CFA 3: Lesson 12  
 EoU: Assessment (A) - eliminate Q 3 & Q 7

**Pacing for Unit****Family Overview (link below)**

[Rigid Transformations and Congruence](#)

**Integration of Technology:**

*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**

		<b>(beyond core resources):</b>
Alternate interior angles, clockwise, complementary, congruent, coordinate plane, corresponding, counterclockwise, image, reflection, right angle, rigid transformation, rotation, sequence of transformations, straight angle, supplementary, tessellation, transformations, translation, transversal, vertex, vertical angles		<ul style="list-style-type: none"> <li>●DESMOS</li> <li>●Edulastic</li> </ul>
<b>Connections to Prior Units:</b>		<b>Connections to Future Units:</b>
None		Acc7.2
<b>Differentiation through <i>Universal Design for Learning</i></b>		
<b>UDL Indicator</b>		<b>Teacher Actions:</b>
<b>Comprehension:</b> Guide information processing and visualization		<ul style="list-style-type: none"> <li>●Give explicit prompts for each step in a sequential process</li> <li>●Provide options for organizational methods and approaches (tables and algorithms for processing mathematical operations)</li> <li>●Provide interactive models that guide exploration and new understandings</li> <li>●Introduce graduated scaffolds that support information processing strategies</li> <li>●Progressively release information (e.g., sequential highlighting)</li> <li>●Remove unnecessary distractions unless they are essential to the instructional goal</li> </ul>
<b>Supporting Multilingual/English Learners</b>		
<b>Related <i>CELP standards:</i></b>		<b>Learning Targets:</b>
An EL can determine the meaning of words and phrases in informational text.		Applies to ALL learning targets in this unit.
<b>Lesson Sequence</b>	<b>Learning Target</b>	<b>Success Criteria</b>
1 (Lessons 1-5)	<ul style="list-style-type: none"> <li>●I can identify and describe the movements of figures. (Lessons 1-3)</li> <li>●I can apply transformations to points on a grid if I know their coordinates. (Lesson 4)</li> </ul>	<p>Lesson 1</p> <ul style="list-style-type: none"> <li>●I can describe how a figure moves and turns to get from one position to another.</li> </ul> <p>Lesson 2</p> <ul style="list-style-type: none"> <li>●I can identify corresponding points before and after a transformation.</li> <li>●I know the difference between translations, rotations, and reflections.</li> </ul> <p>Lesson 3</p> <ul style="list-style-type: none"> <li>●I can use grids to carry out transformations of figures.</li> </ul>

		<ul style="list-style-type: none"> <li>● I can use the terms translation, rotation, and reflection to precisely describe transformations.</li> </ul> <p>Lesson 4</p> <ul style="list-style-type: none"> <li>● I can apply transformations to points on a grid if I know their coordinates.</li> </ul> <p>Lesson 5</p> <ul style="list-style-type: none"> <li>● I can apply transformations to a polygon on a grid if I know the coordinates of its vertices.</li> </ul>
2 (Lessons 6-9)	<ul style="list-style-type: none"> <li>● I can justify whether or not rigid transformations could produce an image. (Lessons 6)</li> <li>● I can generalize about rotating line segments 180 degrees. (Lesson 7)</li> <li>● I can generalize about the relationship between vertical angles. (Lesson 8)</li> <li>● I can describe transformations using corresponding points, line segments and angles. (Lesson 9)</li> </ul>	<p>Lesson 6</p> <ul style="list-style-type: none"> <li>● I can describe the effects of a rigid transformation on the lengths and angles in a polygon.</li> </ul> <p>Lesson 7</p> <ul style="list-style-type: none"> <li>● I can describe how to move one part of a figure to another using a rigid transformation.</li> </ul> <p>Lesson 8</p> <ul style="list-style-type: none"> <li>● I can describe the effects of a rigid transformation on a pair of parallel lines.</li> <li>● If I have a pair of vertical angles and know the angle measure of one of them, I can find the angle measure of the other.</li> </ul> <p>Lesson 9</p> <ul style="list-style-type: none"> <li>● I can find missing side lengths and angle measures using properties of rigid transformations.</li> </ul>
3 (Lessons 10-11)	<ul style="list-style-type: none"> <li>● I can justify whether or not shapes are congruent. (10)</li> <li>● I can determine if a polygon is congruent and justify it with reasoning. (11)</li> </ul>	<p>Lesson 10</p> <ul style="list-style-type: none"> <li>● I can decide visually whether or not two figures are congruent.</li> </ul> <p>Lesson 11</p> <ul style="list-style-type: none"> <li>● I can decide using rigid transformations whether or not two figures are congruent.</li> <li>● I can use distances between points to decide if two figures are congruent.</li> </ul>
4 (Lessons 12-14)	<ul style="list-style-type: none"> <li>● I can generalize the triangle sum theorem using rigid transformations or the congruence or alternate interior angles of parallel lines cut by a transversal. (14)</li> </ul>	<p>Lesson 12</p> <ul style="list-style-type: none"> <li>● I can find unknown angle measures by reasoning about complementary or supplementary angles.</li> <li>● If I have two parallel lines cut by a transversal, I can identify alternate interior angles and use that to find missing angle measurements.</li> </ul> <p>Lesson 13</p>

		<ul style="list-style-type: none"><li>● If I know two of the angle measures in a triangle, I can find the third angle measure.</li></ul>
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Lesson 14

- I can explain using pictures why the sum of the angles in any triangle is 180 degrees.

**Unit Title:**

Unit 7-Scale Drawings, Similarity, and Slope (ACC 7, Unit 2)

**Relevant Standards: Bold indicates priority**

Lesson	Standards
Acc7.2.1	7.G.A.1
Acc7.2.2	7.G.A.1, 7.RP.A.2
Acc7.2.3	7.G.A.1, 7.RP.A.2
Acc7.2.4	7.G.A.1
Acc7.2.5	7.G.A.1
Acc7.2.6	7.G.A.1, 7.G.B.6, 7.RP.A, 7.RP.A.3
Acc7.2.7	7.G.A.1
Acc7.2.8	8.G.A
Acc7.2.9	8.G.A
Acc7.2.10	8.G.A, 8.G.A.3
Acc7.2.11	8.G.A.2, 8.G.A.4
Acc7.2.12	8.G.A.2, 8.G.A.4
Acc7.2.13	8.G.A, 8.G.A.5
Acc7.2.14	8.G.A, 8.G.A.4
Acc7.2.15	8.EE.B.6
Acc7.2.16	8.EE.B.6, 8.G.A
Acc7.2.17	8.EE.B.6, 8.G.A, 8.G.A.3
Acc7.2.18	7.G.A.1
Acc7.2.19	8.G.A.4, 8.G.A.5

**Demonstration of Learning:**

CFA 1: Lesson 5  
 MoU: Assessment (A)  
 CFA 2: Lesson 13  
 CFA 3: Lesson 15  
 EoU: Assessment (A)

**Pacing for Unit**

<b>Family Overview (link below)</b>		<b>Integration of Technology:</b>
<a href="#">Scale Drawings, Similarity, and Slope</a>		<i>Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning</i>
<b>Unit-specific Vocabulary:</b>		<b>Aligned Unit Materials, Resources, and Technology (beyond core resources):</b>
Alternate interior angles, center of a dilation, clockwise, complementary, congruent, coordinate plane, corresponding, counterclockwise, dilation, image, reflection, right angle, rigid transformation, rotation, scale, scale drawing, scale factor, scaled copy, sequence of transformations, similar, slope, straight angle, supplementary, tessellation, transformation, transversal,		DESMOS Edulastic
<b>Connections to Prior Units:</b>		<b>Connections to Future Units:</b>
ACC 6, Unit 2; ACC 7, Unit 1		ACC7, Unit 4
<b>Differentiation through <i>Universal Design for Learning</i></b>		
<b>UDL Indicator</b>		<b>Teacher Actions:</b>
<b>Comprehension:</b> Activate or Supply Background Knowledge		<ul style="list-style-type: none"> <li>●Anchor instruction by linking to and activating relevant prior knowledge (e.g., using visual imagery, concept anchoring, or concept mastery routines)</li> <li>●Use advanced organizers (e.g., KWL methods, concept maps)</li> <li>●Pre-teach critical prerequisite concepts through demonstration or models</li> <li>●Make explicit cross-curricular connections (e.g., teaching literacy strategies in the social studies classroom)</li> </ul>
<b>Supporting Multilingual/English Learners</b>		
<b>Related <i>CELP standards:</i></b>		<b>Learning Targets:</b>
An EL can evaluate and communicate findings to answer questions or solve problems.		See Italicized Learning Target
<b>Lesson Sequence</b>	<b>Learning Target</b>	<b>Success Criteria</b>
1 (Lesson 1-3)	<ul style="list-style-type: none"> <li>●I can describe the features of scaled copies. (Lesson 1)</li> <li>●I can create a scale copy given the scale factor (Lesson 2)</li> </ul>	Lesson 1 <ul style="list-style-type: none"> <li>●I can describe some characteristics of a scaled copy.</li> </ul>

	<ul style="list-style-type: none"> <li>● I can describe the relationship between a scale factor and a scale copy of its original figure (Lesson 3)</li> </ul>	<ul style="list-style-type: none"> <li>● I can tell whether or not a figure is a scaled copy of another figure.</li> </ul> <p>Lesson 2:</p> <ul style="list-style-type: none"> <li>● I can describe what the scale factor has to do with a figure and its scaled copy.</li> <li>● I can draw a scaled copy of a figure using a given scale factor.</li> <li>● I know what operation to use on the side lengths of a figure to produce a scaled copy.</li> </ul> <p>Lesson 3</p> <ul style="list-style-type: none"> <li>● I can describe the effect on a scaled copy when I use a scale factor that is greater than 1, less than 1, or equal to 1.</li> <li>● I can explain how the scale factor that takes Figure A to its copy Figure B is related to the scale factor that takes Figure B to Figure A.</li> </ul>
<p>2 (Lessons 4-6)</p> <p>Skip Lesson 7</p>	<ul style="list-style-type: none"> <li>● I can explain how to use scale drawings to find actual distances and areas (Lessons 4-6)</li> </ul>	<p>Lesson 4</p> <ul style="list-style-type: none"> <li>● I can explain what a scale drawing is, and I can explain what its scale means.</li> <li>● I can use actual distances and a scale to find scaled distances.</li> <li>● I can use a scale drawing and its scale to find actual distances.</li> </ul> <p>Lesson 5</p> <ul style="list-style-type: none"> <li>● I can determine the scale of a scale drawing when I know lengths on the drawing and corresponding actual lengths.</li> <li>● I know how different scales affect the lengths in the scale drawing.</li> <li>● When I know the actual measurements, I can create a scale drawing at a given scale.</li> </ul> <p>Lesson 6</p> <ul style="list-style-type: none"> <li>● Given a scale drawing, I can create another scale drawing that shows the same thing at a different scale.</li> <li>● I can use a scale drawing to find actual areas.</li> </ul> <p>Skip lesson 7</p>
<p>3 (Lessons 8-10)</p>	<ul style="list-style-type: none"> <li>● I can describe the effects of a dilation on a figure (Lesson 8-9)</li> <li>● I can explain how to apply dilations to images on a coordinate plane. (Lesson 10)</li> </ul>	<p>Lesson 8</p> <ul style="list-style-type: none"> <li>● I can decide if one rectangle is a dilation of another rectangle.</li> <li>● I know how to use a center and a scale factor to describe a dilation.</li> </ul>

		<p>Lesson 9</p> <ul style="list-style-type: none"> <li>● I can apply a dilation to a polygon using a ruler.</li> <li>● I can apply dilations to figures on a circular grid when the center of dilation is the center of the grid.</li> </ul> <p>Lesson 10</p> <ul style="list-style-type: none"> <li>● I can apply dilations to figures on a square grid.</li> <li>● I can apply dilations to polygons on a rectangular grid if I know the coordinates of the vertices and of the center of dilation.</li> <li>● If I know the angle measures and side lengths of a polygon, I know the angles measures and side lengths of the polygon if I apply a dilation with a certain scale factor.</li> </ul>
<p>4 (Lessons 11-14)</p>	<ul style="list-style-type: none"> <li>● I can describe sequences of transformations to justify if two polygons are similar (Lessons 11-12)</li> <li>● I can explain how to determine whether triangles are congruent, similar, or neither. (Lesson 13)</li> <li>● I can use properties of similar figures to find missing side lengths. (Lesson 14)</li> </ul>	<p>Lesson 11</p> <ul style="list-style-type: none"> <li>● I can apply a sequence of transformations to one figure to get a similar figure.</li> <li>● I can use a sequence of transformations to explain why two figures are similar.</li> </ul> <p>Lesson 12</p> <ul style="list-style-type: none"> <li>● I can use angle measures and side lengths to conclude that two polygons are not similar.</li> <li>● I know the relationship between angle measures and side lengths in similar polygons.</li> </ul> <p>Lesson 13</p> <ul style="list-style-type: none"> <li>● I know how to decide if two triangles are similar just by looking at their angle measures.</li> </ul> <p>Lesson 14</p> <ul style="list-style-type: none"> <li>● I can decide if two triangles are similar by looking at quotients of lengths of corresponding sides.</li> <li>● I can find missing side lengths in a pair of similar triangles using quotients of side lengths.</li> </ul>
<p>5 (Lessons 15-17)</p>	<ul style="list-style-type: none"> <li>● I can justify that slope triangles are similar. (15)</li> <li>● I can determine if a point is on a line. (Lesson 16 &amp; 17)</li> </ul>	<p>Lesson 15</p> <ul style="list-style-type: none"> <li>● I can draw a line on a grid with a given slope.</li> <li>● I can find the slope of a line on a grid.</li> </ul> <p>Lesson 16</p> <ul style="list-style-type: none"> <li>● I can decide whether a point is on a line by finding quotients of horizontal and vertical distances.</li> </ul> <p>Lesson 17</p>

- |  |  |   |
|--|--|---|
|  |  | <ul style="list-style-type: none"><li>● I can find an equation for a line and use that to decide which points are on that line.</li></ul> |
|--|--|---|

**Unit Title:**

Unit 8-Linear Relationships (ACC 7, Unit 5)

**Relevant Standards: Bold indicates priority**

<b>Lesson</b>	<b>Standards</b>
Acc7.5.1	8.EE.B, 8.EE.B.5
Acc7.5.2	8.EE.B, 8.EE.B.5
Acc7.5.3	8.EE.B, 8.EE.B.5
Acc7.5.4	8.EE.B
Acc7.5.5	8.EE.B, 8.EE.B.5
Acc7.5.6	8.EE.B, 8.EE.B.6
Acc7.5.7	8.EE.B, 8.G.A.1
Acc7.5.8	8.EE.B
Acc7.5.9	8.EE.B, 8.EE.B.6
Acc7.5.10	8.EE.B, 8.EE.C
Acc7.5.11	8.EE.C, 8.EE.C.8, 8.EE.C.8.a
Acc7.5.12	8.EE.C.8
Acc7.5.13	8.EE.C.8, 8.EE.C.8.a, 8.EE.C.8.b
Acc7.5.14	8.EE.C.8, 8.EE.C.8.a
Acc7.5.15	8.EE.C.8
Acc7.5.16	8.EE.C.8, 8.EE.C.8.b, 8.EE.C.8.c
Acc7.5.17	8.SPA, 8.SPA.1
Acc7.5.18	8.SPA.1, 8.SPA.3
Acc7.5.19	8.SPA.1, 8.SPA.2
Acc7.5.20	8.SPA.1, 8.SPA.2
Acc7.5.21	8.SPA.1, 8.SPA.2, 8.SPA.3
Acc7.5.22	8.SPA.1, 8.SPA.2, 8.SPA.3
Acc7.5.23	8.SPA.4
Acc7.5.24	8.SPA.4

Acc7.5.25	8.EE.B.6, 8.EE.C.8.a
Acc7.5.26	8.EE.C.8.c
Acc7.5.27	8.SPA
<b>Demonstration of Learning:</b>	<b>Pacing for Unit</b>
CFA 1: Lesson 5 CFA 2: Lesson 10 MoU: Assessment (A) CFA 3: Lesson 15 EoU: Assessment (B) - add questions 1 & 3 from (A)	
<b>Family Overview (link below)</b>	<b>Integration of Technology:</b>
<a href="#">Linear Relationships</a>	<i>Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning</i>
<b>Unit-specific Vocabulary:</b>	<b>Aligned Unit Materials, Resources, and Technology (beyond core resources):</b>
Alternate interior angles, center of a dilation, clockwise, coefficient, complementary, congruent, constant of proportionality, constant term, coordinate plane, corresponding, counterclockwise, dilation, equivalent expressions, expand, factor, image, linear relationship, negative association, outlier, positive association, rate of change, reflection, relative frequency, right angle, rotation, scale, scale drawing, scale factor, scaled copy, scatter plot, segmented bar graph, sequence of transformations, similar, slope, solution to an equation with two variables, solution to an inequality, straight angle, supplementary, system of equations, term, tessellation, transformation, translation, transversal, two-way table, vertex, vertical angles, vertical intercept	DESMOS Edulastic
<b>Connections to Prior Units:</b>	<b>Connections to Future Units:</b>
Acc6.8	Acc7.6
<b>Differentiation through <a href="#">Universal Design for Learning</a></b>	
<b>UDL Indicator</b>	<b>Teacher Actions:</b>
<b>Expression &amp; Communication:</b> Use multiple media for communication	<ul style="list-style-type: none"> <li>• Compose in multiple media such as text, speech, drawing, illustration, comics, storyboards, design, film, music, dance/movement, visual art, sculpture, or video</li> <li>• Use physical manipulatives (e.g., blocks, 3D models, base-ten blocks)</li> <li>• Use social media and interactive web tools (e.g., discussion forums, chats, web design,</li> </ul>

		<p>annotation tools, storyboards, comic strips, animation presentations)</p> <ul style="list-style-type: none"> <li>Solve problems using a variety of strategies</li> </ul>
<b>Supporting Multilingual/English Learners</b>		
<b>Related <u>CELP standards:</u></b>		<b>Learning Targets:</b>
An ML can construct appropriate oral and written claims and support them with reasoning and evidence.		Applies to ALL learning targets in this unit.
<b>Lesson Sequence</b>	<b>Learning Target</b>	<b>Success Criteria</b>
<p>1 Lessons 1-3</p>	<ul style="list-style-type: none"> <li>I can represent situations involving proportional relationships. (1)</li> <li>I can interpret situations involving proportional relationships. (1)</li> <li>I can represent constants of proportionality in different ways (2).</li> <li>I can interpret graphs using different scales (2)</li> </ul>	<p>Lesson 1</p> <ul style="list-style-type: none"> <li>I can graph a proportional relationship from a story.</li> <li>I can use the constant of proportionality to compare the pace of different animals.</li> </ul> <p>Lesson 2</p> <ul style="list-style-type: none"> <li>I can graph a proportional relationship from an equation.</li> <li>I can scale and label coordinate axes in order to graph a proportional relationship.</li> <li>I can tell when two graphs are of the same proportional relationship even if the scales are different.</li> </ul> <p>Lesson 3</p> <ul style="list-style-type: none"> <li>I can compare proportional relationships represented in different ways.</li> </ul>
<p>2 Lessons 4-7</p>	<ul style="list-style-type: none"> <li>I can explain how to use a graph to determine information about a linear situation (4).</li> <li>I can interpret slopes and intercepts of linear graphs (5).</li> <li>I can explain how to determine slope from a graph (5).</li> <li>I can represent slope using expressions (6).</li> </ul>	<p>Lesson 4</p> <ul style="list-style-type: none"> <li>I can find the rate of change of a linear relationship by figuring out the slope of the line representing the relationship.</li> </ul> <p>Lesson 5</p> <ul style="list-style-type: none"> <li>I can interpret the vertical intercept of a graph of a real-world situation.</li> <li>I can match graphs to the real-world situations they represent by identifying the slope and the vertical intercept.</li> </ul> <p>Lesson 6</p> <ul style="list-style-type: none"> <li>I can use patterns to write a linear equation to represent a situation.</li> <li>I can write an equation for the relationship between the total volume in a graduated</li> </ul>

		<p>cylinder and the number of objects added to the graduated cylinder.</p> <p>Lesson 7</p> <ul style="list-style-type: none"> <li>● I can explain where to find the slope and vertical intercept in both an equation and its graph.</li> <li>● I can write equations of lines using <math>y=mx+b</math>.</li> </ul>
<p>3 Lessons 8-11</p>	<ul style="list-style-type: none"> <li>● I can represent situations using negative slopes and slopes of zero. (8)</li> <li>● I can interpret situations using negative slopes and slopes of zero (8).</li> <li>● I can represent situations by graphing lines and writing equations (10).</li> <li>● I can explain how slope relates to changes in a situation (10).</li> </ul>	<p>Lesson 8</p> <ul style="list-style-type: none"> <li>● I can give an example of a situation that would have a negative slope when graphed.</li> <li>● I can look at a graph and tell if the slope is positive or negative and explain how I know.</li> </ul> <p>Lesson 9</p> <ul style="list-style-type: none"> <li>● I can calculate positive and negative slopes given two points on the line.</li> <li>● I can write equations of vertical and horizontal lines.</li> </ul> <p>Lesson 10</p> <ul style="list-style-type: none"> <li>● I know that the graph of an equation is a visual representation of all the solutions to the equation.</li> <li>● I understand what the solution to an equation in two variables is.</li> </ul> <p>Lesson 11</p> <ul style="list-style-type: none"> <li>● I can find solutions <math>(x,y)</math> to linear equations given either the <math>x</math>- or the <math>y</math>-value to start from.</li> </ul>
<p>4 Lessons 12-16</p> <p>Skip lessons 17-24</p>	<ul style="list-style-type: none"> <li>● I can represent situations involving systems of linear equations (12,13, 16)</li> <li>● I can interpret situations involving systems of linear equations (13).</li> </ul>	<p>Lesson 12</p> <ul style="list-style-type: none"> <li>● I can use graphs to find an ordered pair that two real-world situations have in common.</li> </ul> <p>Lesson 13</p> <ul style="list-style-type: none"> <li>● I can explain the solution to a system of equations in a real-world context.</li> <li>● I can explain what a system of equations is.</li> <li>● I can make graphs to find an ordered pair that two real-world situations have in common.</li> </ul> <p>Lesson 14</p> <ul style="list-style-type: none"> <li>● I can graph a system of equations.</li> <li>● I can solve systems of equations using algebra.</li> </ul> <p>Lesson 15</p> <ul style="list-style-type: none"> <li>● I can use the structure of equations to help me figure out how many solutions a system of equations has.</li> </ul> <p>Lesson 16</p>

		<ul style="list-style-type: none"> <li>● I can write a system of equations from a real-world situation.</li> </ul>
<p>5 <i>Optional Lessons</i> 25-26</p>	<ul style="list-style-type: none"> <li>● I can represent situations involving linear relationships. (25)</li> <li>● I can interpret situations involving linear relationships (25).</li> <li>● I can explain how to answer questions about systems of equations (26).</li> </ul>	<p>Lesson 25</p> <ul style="list-style-type: none"> <li>● I can write linear equations to reason about real-world situations.</li> </ul> <p>Lesson 26</p> <ul style="list-style-type: none"> <li>● I can use a system of equations to represent a real-world situation and answer questions about the situation.</li> </ul>

**Unit Title:**

Unit 9-Functions and Volume (ACC 7, Unit 6)

**Relevant Standards: Bold indicates priority**

<b>Lesson</b>	<b>Standards</b>
Acc7.6.1	8.F.A.1
Acc7.6.2	8.F.A.1
Acc7.6.3	8.F.A, 8.F.A.1, 8.F.B.4
Acc7.6.4	8.F.A.1, 8.F.A.3
Acc7.6.5	8.F.A.1, 8.F.B, 8.F.B.5
Acc7.6.6	8.F.B.5
Acc7.6.7	8.F.A.2, 8.F.A.3
Acc7.6.8	8.F.A.2, 8.F.A.3, 8.F.B.4
Acc7.6.9	8.F.B.4
Acc7.6.10	8.F.B, 8.F.B.4, 8.F.B.5
Acc7.6.11	7.G.A.3, 7.G.B.6
Acc7.6.12	8.F.B, 8.F.B.4, 8.G.C
Acc7.6.13	8.G.C
Acc7.6.14	7.G.B.6
Acc7.6.15	7.G.A.3, 7.G.B.6
Acc7.6.16	7.G.B.6
Acc7.6.17	7.G.B, 7.G.B.6, 7.R.P.A
Acc7.6.18	8.G.C.9
Acc7.6.19	8.G.C.9
Acc7.6.20	8.G.C.9
Acc7.6.21	8.F.A.1, 8.F.B, 8.G.C, 8.G.C.9
Acc7.6.22	8.F.A.3, 8.F.B, 8.G.C.9
Acc7.6.23	8.G.C, 8.G.C.9
Acc7.6.24	8.G.C, 8.G.C.9
Acc7.6.25	8.G.C.9
Acc7.6.26	7.G.A.2, 7.G.B.6

Acc7.6.27	8.F.A, 8.G.C.9
<b>Demonstration of Learning:</b>	<b>Pacing for Unit</b>
CFA 1 Lesson 5 MoU Assessment (B) CFA 2 Lesson 20 CFA 3 Lesson 24 EoU Assessment (A)	
<b>Family Overview (link below)</b>	<b>Integration of Technology:</b>
<a href="#">Functions and Volume</a>	<i>Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning</i>
<b>Unit-specific Vocabulary:</b>	<b>Aligned Unit Materials, Resources, and Technology (beyond core resources):</b>
Alternate interior angles, base, center of a dilation, clockwise, coefficient, complementary, cone, congruent, constant of proportionality, constant term, coordinate plane, corresponding, counterclockwise, cross section, cylinder, dependent variable, dilation, equivalent expressions, expand, factor, function, image, independent variable, linear relationship, negative association, outlier, positive association, prism, pyramid, radius, rate of change, reflection, relative frequency, right angle, rigid transformation, rotation, scale, scale drawing, scale factor, scaled copy, segmented bar graph, sequence of transformations, similar, slope, solution to an equation, solution to an inequality, sphere, straight angle, supplementary, surface area, system of equations, term, tessellation, transformation, translation, transversal, two-way table, vertex, vertical angles, vertical intercept, volume	DESMOS Edulastic
<b>Connections to Prior Units:</b>	<b>Connections to Future Units:</b>
ACC 6, Unit 1	None
<b>Differentiation through <a href="#">Universal Design for Learning</a></b>	
<b>UDL Indicator</b>	<b>Teacher Actions:</b>
<b>Comprehension:</b> Highlight patterns, critical features, big ideas, and relationships	<ul style="list-style-type: none"> <li>● Highlight or emphasize key elements in text, graphics, diagrams, formulas</li> <li>● Use multiple examples and non-examples to emphasize critical features</li> <li>● Use cues and prompts to draw attention to critical features</li> </ul>

		<ul style="list-style-type: none"> <li>● Highlight previously learned skills that can be used to solve unfamiliar problems</li> </ul>
<b>Supporting Multilingual/English Learners</b>		
<b>Related <i>CELP standards:</i></b>		<b>Learning Targets:</b>
An ML student can adapt language choices to purpose, task, and audience when speaking and writing.		See <i>Italicized</i> Learning Targets
<b>Lesson Sequence</b>	<b>Learning Target</b>	<b>Success Criteria</b>
1 (Lessons 1-2)	<ul style="list-style-type: none"> <li>● <i>I can describe and identify how input-output diagrams represent rules. (Lesson 1)</i></li> <li>● <i>I can describe and identify different situations in context, using function rules (Lesson 2)</i></li> </ul>	<p>Lesson 1</p> <ul style="list-style-type: none"> <li>● I can write rules when I know input-output pairs.</li> <li>● I know how an input-output diagram represents a rule.</li> </ul> <p>Lesson 2</p> <ul style="list-style-type: none"> <li>● I know that a function is a rule with exactly one output for each allowable input.</li> <li>● I know that if a rule has exactly one output for each allowable input, then the output depends on the input.</li> </ul>
2 (Lessons 3-7)	<ul style="list-style-type: none"> <li>● I can interpret different representations of functions, to identify independent and dependent variables, to write equations. (Lesson 3 &amp; 4)</li> <li>● I can interpret multiple representations of functions, including graph, tables &amp; equations, and explain how to find information in each type of representation (Lessons 5-7)</li> </ul>	<p>Lesson 3</p> <ul style="list-style-type: none"> <li>● I can find the output of a function when I know the input.</li> <li>● I can name the independent and dependent variables for a given function and represent the function with an equation.</li> </ul> <p>Lesson 4</p> <ul style="list-style-type: none"> <li>● I can identify graphs that do, and do not, represent functions.</li> <li>● I can use a graph of a function to find the output for a given input and to find the input(s) for a given output.</li> </ul> <p>Lesson 5</p> <ul style="list-style-type: none"> <li>● I can explain the story told by the graph of a function.</li> </ul> <p>Lesson 6</p> <ul style="list-style-type: none"> <li>● I can draw the graph of a function that represents a real-world situation.</li> </ul> <p>Lesson 7</p> <ul style="list-style-type: none"> <li>● I can compare inputs and outputs of functions that are represented in different ways.</li> </ul>

<p>3 (Lessons 8-10)</p>	<ul style="list-style-type: none"> <li>● <i>I can analyze situations to create a model of a non linear data, to answer questions as it relates to rate of change and initial value (Lessons 8-10)</i></li> </ul>	<p>Lesson 8</p> <ul style="list-style-type: none"> <li>● I can determine whether a function is increasing or decreasing based on whether its rate of change is positive or negative.</li> <li>● I can explain in my own words how the graph of a linear function relates to its rate of change and initial value.</li> </ul> <p>Lesson 9</p> <ul style="list-style-type: none"> <li>● I can decide when a linear function is a good model for data and when it is not.</li> <li>● I can use data points to model a linear function.</li> </ul> <p>Lesson 10</p> <ul style="list-style-type: none"> <li>● I can create graphs of nonlinear functions with pieces of linear functions.</li> </ul>
<p>4 (Lessons 11-20)</p> <p><b>Skip Lessons 14-17</b></p>	<ul style="list-style-type: none"> <li>● I can describe, compare and contrast different cross sections that could result from slicing a pyramid or prism (Lesson 11)</li> <li>● <i>I can interpret (orally and in writing) a graph of heights of certain cylinders as a function of volume, and compare the rates of change of the functions (lesson 12)</i></li> <li>● I can estimate the volumes of various containers using different units of measure, and explain (orally) the reasoning. (Lesson 13)</li> <li>● <i>I can use the volume formula for cones and cylinders to solve real world situations (Lessons 18-20)</i></li> </ul>	<p>Lesson 11</p> <ul style="list-style-type: none"> <li>● I can explain that when a three dimensional figure is sliced it creates a face that is two dimensional.</li> <li>● I can picture different cross sections of prisms and pyramids.</li> </ul> <p>Lesson 12</p> <ul style="list-style-type: none"> <li>● I can collect data about a function and represent it as a graph.</li> <li>● I can describe the graph of a function in words.</li> </ul> <p>Lesson 13</p> <ul style="list-style-type: none"> <li>● I know that volume is the amount of space contained inside a three-dimensional figure.</li> <li>● I recognize the 3D shapes cylinder, cone, rectangular prism, and sphere.</li> </ul> <p><b>Skip Lessons 14-17</b></p> <p>Lesson 18</p> <ul style="list-style-type: none"> <li>● I can find missing information about a cylinder if I know its volume and some other information.</li> <li>● I know the formula for the volume of a cylinder.</li> </ul> <p>Lesson 19</p> <ul style="list-style-type: none"> <li>● I can find the volume of a cone in mathematical and real-world situations.</li> <li>● I know the formula for the volume of a cone.</li> </ul> <p>Lesson 20</p> <ul style="list-style-type: none"> <li>● I can find missing information about a cone if I know its volume and some other information.</li> </ul>
<p>5 (Lessons)</p>	<ul style="list-style-type: none"> <li>● I can determine what information is needed to</li> </ul>	<p>Lesson 21</p>

<p>21-25)</p>	<p>solve a problem involving volumes of cones, cylinders, and spheres. (Lesson 23-25)</p> <ul style="list-style-type: none"> <li>● <i>I can explain and model relationships between scale factor and volume of cylinders and cones. (Lessons 21-22)</i></li> </ul>	<ul style="list-style-type: none"> <li>● I can create a graph the relationship between volume and height for all cylinders (or cones) with a fixed radius.</li> <li>● I can explain in my own words why changing the height by a scale factor changes the volume by the same scale factor.</li> </ul> <p>Lesson 22</p> <ul style="list-style-type: none"> <li>● I can create a graph representing the relationship between volume and radius for all cylinders (or cones) with a fixed height.</li> <li>● I can explain in my own words why changing the radius by a scale factor changes the volume by the scale factor squared.</li> </ul> <p>Lesson 23</p> <ul style="list-style-type: none"> <li>● I can estimate the volume of a hemisphere by calculating the volume of shape I know is larger and the volume of a shape I know is smaller.</li> </ul> <p>Lesson 24</p> <ul style="list-style-type: none"> <li>● I can find the volume of a sphere when I know the radius.</li> </ul> <p>Lesson 25</p> <ul style="list-style-type: none"> <li>● I can find the radius of a sphere if I know its volume.</li> <li>● I can solve mathematical and real-world problems about the volume of cylinders, cones, and spheres.</li> </ul>
<p>6 (Lessons 27)</p> <p><b>Skip Lesson 26</b></p>	<ul style="list-style-type: none"> <li>● <i>Interpret (orally and in writing) functions that represent the volume of a sphere, cone, and cylinder, using different representations. (Lesson 27)</i></li> </ul>	<p>Lesson 27</p> <ul style="list-style-type: none"> <li>● I can compare functions about volume represented in different ways.</li> </ul>

**Unit Title:**

Unit 10-Pythagorean Theorem and Irrational Numbers (ACC 7, Unit 8)

**Relevant Standards: Bold indicates priority**

Lesson	Standards
Acc7.8.1	8.EE.A.2, 8.G.B, 8.G.B.6, 8.NS.A.2
Acc7.8.2	8.EE.A.2, 8.FB, 8.NS.A
Acc7.8.3	8.EE.A.2, 8.NS.A, 8.NS.A.2
Acc7.8.4	8.EE.A.2, 8.NS.A.2
Acc7.8.5	8.G.B, 8.G.B.6, 8.G.B.7
Acc7.8.6	8.G.B.6, 8.G.B.7
Acc7.8.7	8.G.B, 8.G.B.6
Acc7.8.8	8.EE.A.2, 8.G.B.7, 8.NS.A
Acc7.8.9	8.G.B.8
Acc7.8.10	8.EE.A.2, 8.NS.A.2
Acc7.8.11	8.EE.A, 8.NS.A, 8.NS.A.1
Acc7.8.12	8.NS.A.1
Acc7.8.13	8.G.B.7

**Demonstration of Learning:**

CFA 1 (Lesson 3)  
 CFA 2 (Lesson 7)  
 CFA 3 (Lesson 10)  
 EoU Assessment (A)

**Pacing for Unit****Family Overview (link below)**

[Pythagorean Theorem and Irrational Numbers](#)

**Integration of Technology:**

*Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning*

**Unit-specific Vocabulary:**

Alternate interior angles, base (of prism), base (of an exponent), center of a dilation, clockwise, coefficient, complementary, cone, congruent, constant of proportionality, constant term, coordinate plane,

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

DESMOS  
 Edulastic

corresponding, counterclockwise, cross section, cube root, cylinder, dependent variable, dilation, equivalent expressions, expand, exponent, factor, function, hypotenuse, image, independent variable, irrational number, legs, linear relationship, negative association, outlier, positive association, prism, pyramid, pythagorean theorem, radius, rate of change, rational number, reciprocal, reflection, relative frequency, repeating decimal, right angle, rigid transformation, rotation, scale, scale drawing, scale factor, scaled copy, scatter plot, scientific notation, segmented bar graph, sequence of transformations, similar, slope, solution to an equation, solution to an inequality, sphere, square root, straight angle, supplementary, surface area, system of equations, term, tessellation, transformation, translation, transversal, two-way table, vertex, vertical angles, vertical intercept, volume		
<b>Connections to Prior Units:</b>		<b>Connections to Future Units:</b>
ACC 6, Unit 1		None
<b>Differentiation through <i>Universal Design for Learning</i></b>		
<b>UDL Indicator</b>		<b>Teacher Actions:</b>
<b>Representation:</b> Clarifying vocabulary and symbols		<ul style="list-style-type: none"> <li>• Pre-teach vocabulary and symbols, especially in ways that promote connection to the learners' experience and prior knowledge</li> <li>• Provide graphic symbols with alternative text descriptions</li> <li>• Highlight how complex terms, expressions, or equations are composed of simpler words or symbols</li> <li>• Embed support for vocabulary and symbols within the text (e.g., hyperlinks or footnotes to definitions, explanations, illustrations, previous coverage, translations)</li> </ul>
<b>Supporting Multilingual/English Learners</b>		
<b>Related <i>CELP standards:</i></b>		<b>Learning Targets:</b>
An EL can evaluate and communicate findings to answer questions or solve problems.		Applies to all Learning Targets.
<b>Lesson Sequence</b>	<b>Learning Target</b>	<b>Success Criteria</b>

<p>1 (Lessons 1-4)</p>	<ul style="list-style-type: none"> <li>● <i>I can explain and model square roots using math notation (Lessons 1-2)</i></li> <li>● <i>I can explain the relationship between square roots and rational/irrational numbers using a number line (Lesson 3-4)</i></li> </ul>	<p>Lesson 1</p> <ul style="list-style-type: none"> <li>● I can find the area of a tilted square on a grid by using methods like “decompose and rearrange” and “surround and subtract.”</li> <li>● I can find the area of a triangle.</li> </ul> <p>Lesson 2</p> <ul style="list-style-type: none"> <li>● I can explain what a square root is.</li> <li>● If I know the area of a square, I can express its side length using square root notation.</li> <li>● I understand the meaning of expressions like "SQUARE ROOT 25" and "SQUARE ROOT 3".</li> </ul> <p>Lesson 3</p> <ul style="list-style-type: none"> <li>● I know what an irrational number is and can give an example</li> <li>● I know what a rational number is and can give an example.</li> </ul> <p>Lesson 4</p> <ul style="list-style-type: none"> <li>● I can find a decimal approximation for square roots.</li> <li>● I can plot square roots on the number line.</li> <li>● When I have a square root, I can reason about which two whole numbers it is between.</li> </ul>
<p>2 (Lessons 5-9)</p>	<ul style="list-style-type: none"> <li>● <i>I can use the Pythagorean Theorem to justify if a triangle is a right triangle (Lessons 5-7)</i></li> <li>● <i>I can use the Pythagorean Theorem to solve problems (Lessons 8, 9 &amp; 13)</i></li> </ul>	<p>Lesson 5</p> <ul style="list-style-type: none"> <li>● <i>I can explain what the Pythagorean Theorem says.</i></li> </ul> <p>Lesson 6</p> <ul style="list-style-type: none"> <li>● <i>I can explain why the Pythagorean Theorem is true.</i></li> <li>● If I know the lengths of two sides, I can find the length of the third side in a right triangle.</li> <li>● When I have a right triangle, I can identify which side is the hypotenuse and which sides are the legs.</li> </ul> <p>Lesson 7</p> <ul style="list-style-type: none"> <li>● I can explain why it is true that if the side lengths of a triangle satisfy the equation <math>a^2 + b^2 = c^2</math> then it must be a right triangle.</li> <li>● If I know the side lengths of a triangle, I can determine if it is a right triangle or not.</li> </ul> <p>Lesson 8</p> <ul style="list-style-type: none"> <li>● I can use the Pythagorean Theorem to solve problems.</li> </ul> <p>Lesson 9</p>

		<ul style="list-style-type: none"> <li>● I can find the distance between two points in the coordinate plane.</li> <li>● I can find the length of a diagonal line segment in the coordinate plane.</li> </ul>
<p>3 (Lessons 10-11)</p> <p><b>Skip Lesson 12</b></p>	<ul style="list-style-type: none"> <li>● <i>I can explain and model cube roots using math notation (Lesson 10)</i></li> <li>● <i>I can represent rational numbers as equivalent decimals and explain the solution method (Lesson 11)</i></li> </ul>	<p>Lesson 10</p> <ul style="list-style-type: none"> <li>● I can approximate cube roots.</li> <li>● I know what a cube root is.</li> <li>● I understand the meaning of expressions like "cubed root 5".</li> </ul> <p>Lesson 11</p> <ul style="list-style-type: none"> <li>● I can write a fraction as a repeating decimal.</li> <li>● I understand that every number has a decimal expansion.</li> </ul>
<p>4 (Lesson 13)</p>	<ul style="list-style-type: none"> <li>● <i>I can use the Pythagorean Theorem to solve problems (Lessons 8, 9 &amp; 13)</i></li> </ul>	<p>Lesson 13</p> <ul style="list-style-type: none"> <li>● I can apply what I have learned about the Pythagorean Theorem to solve a more complicated problem.</li> <li>● I can decide what information I need to know to be able to solve a real-world problem using the Pythagorean Theorem.</li> </ul>

## Course Assessment Map

**Edulastic Links to be Added at a later time**

Unit	Assessment 1	Assessment 2	Assessment 3	Assessment 4	Assessment 5
Unit 1-Proportional Relationships	CFA 1 (L3)	CFA 2 (L7)	CFA 3 (L16)	EOU (B)	
Unit 2-Percentage Increase and Decrease	CFA 1 (L4)	CFA 2 (L8)	CFA 3 (L10)	EOU (A)	
Unit 3-Rational Numbers	CFA 1 (L9)	CFA 2 (L16)	CFA 3 (L20)	EOU (B)*	
Unit 4-Writing and Solving Equations	CFA 1 (L6)	CFA 2 (L9)	CFA 3 (L11)	EOU (A)	
Unit 5-Inequalities, Expressions, and Equations	CFA 1 (L4)	CFA 2 (L9)	CFA 3 (L13)	EOU (B)	
Unit 6-Rigid Transformations and Congruence	CFA 1 (L3)	CFA 2 (L6)	MOU (B)	CFA 3 (L12)	EOU (A)*
Unit 7-Scale Drawings, Similarity and Slope	CFA 1 (L5)	MOU (A)	CFA 2 (L13)	CFA 3 (L15)	EOU (A)
Unit 8-Linear relationships	CFA 1 (L5)	CFA 2 (L10)	MOU (A)	CFA 3 (L15)	EOU (B)*
Unit 9-Functions and Volume	CFA 1 (L5)	MOU (B)	CFA 2 (L120)	CFA (L24)	EOU (A)
Unit 10-Pythagorean Theorem and Irrational Numbers	CFA 1 (L 3)	CFA 2 (L7)	CFA 3 (L10)	EOU (A)	

\*Requires assessment modification due to skipped lessons.

Course Title:	Content Area:	Grade Level:	Credit (if applicable)
Grade 7 Mathematics	Mathematics	Grade 7	

**Course Description:**

Students start grade 7 by studying scale drawings, an engaging geometric topic that supports the subsequent work on proportional relationships in the second and fourth units. It also makes use of grade 6 arithmetic understanding and skill, without arithmetic becoming the major focus of attention at this point. Geometry and proportional relationships are also interwoven in the third unit on circles, where the important proportional relationship between a circle's circumference and its diameter is studied. By the time students reach the fifth unit on operations with rational numbers, both positive and negative, students have had time to brush up on and solidify their understanding and skill in grade 6 arithmetic. The work on operations on rational numbers, with its emphasis on the role of the properties of operations in determining the rules for operating with negative numbers, is a natural lead-in to the work on expressions and equations in the next unit. Students then put their arithmetical and algebraic skills to work in the last two units, on angles, triangles, and prisms, and on probability and sampling.

**Aligned Core Resources:**

Kendall Hunt Illustrative Mathematics

**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**

Standards	Aligned Lessons
<b>7.EE.A</b>	7.7.3
<b>7.EE.A.1</b>	7.6.18, 7.6.19, 7.6.20, 7.6.21, 7.6.22, 7.9.7
<b>7.EE.A.2</b>	7.6.12
<b>7.EE.B</b>	7.9.8
<b>7.EE.B.3</b>	7.3.11, 7.5.12, 7.5.17, 7.6.2, 7.6.3, 7.6.4, 7.6.5, 7.6.6, 7.6.11, 7.6.12
<b>7.EE.B.4</b>	7.5.15, 7.6.5, 7.6.9, 7.6.11, 7.6.12, 7.6.13, 7.6.15, 7.7.5, 7.9.3
<b>7.EE.B.4.a</b>	7.5.15, 7.5.16, 7.6.4, 7.6.5, 7.6.7, 7.6.8, 7.6.9, 7.6.10, 7.6.11, 7.6.12, 7.9.7
<b>7.EE.B.4.b</b>	7.6.14, 7.6.16, 7.6.17
<b>7.G.A</b>	7.3.2, 7.3.7, 7.7.1, 7.7.4, 7.7.9
<b>7.G.A.1</b>	7.1.1, 7.1.2, 7.1.3, 7.1.4, 7.1.5, 7.1.6, 7.1.7, 7.1.8, 7.1.9, 7.1.10, 7.1.11, 7.1.12, 7.1.13, 7.2.1, 7.3.6, 7.3.11,

	7.9.4, 7.9.13
<b>7.G.A.2</b>	7.3.2, 7.7.6, 7.7.7, 7.7.8, 7.7.9, 7.7.10, 7.7.17
<b>7.G.A.3</b>	7.7.11, 7.7.13
<b>7.G.B</b>	7.3.6, 7.3.7, 7.7.1, 7.7.2, 7.7.4, 7.7.15, 7.7.16, 7.9.6
<b>7.G.B.4</b>	7.3.3, 7.3.4, 7.3.5, 7.3.7, 7.3.8, 7.3.9, 7.3.10, 7.3.11, 7.9.4, 7.9.11, 7.9.12
<b>7.G.B.5</b>	7.7.2, 7.7.3, 7.7.4, 7.7.5
<b>7.G.B.6</b>	7.1.6, 7.2.8, 7.3.6, 7.7.12, 7.7.13, 7.7.14, 7.7.15, 7.7.16, 7.7.17, 7.9.4, 7.9.5, 7.9.9
<b>7.NS.A</b>	7.5.13
<b>7.NS.A.1</b>	7.5.1, 7.5.4, 7.5.6, 7.6.18, 7.7.6
<b>7.NS.A.1.a</b>	7.5.2, 7.5.3
<b>7.NS.A.1.b</b>	7.5.1, 7.5.2, 7.5.3
<b>7.NS.A.1.c</b>	7.5.1, 7.5.3, 7.5.5, 7.5.6, 7.5.7, 7.6.18
<b>7.NS.A.1.d</b>	7.5.3
<b>7.NS.A.2</b>	7.5.9, 7.5.11
<b>7.NS.A.2.a</b>	7.5.8, 7.5.9
<b>7.NS.A.2.b</b>	7.5.11
<b>7.NS.A.2.c</b>	7.5.9, 7.5.10
<b>7.NS.A.2.d</b>	7.4.5, 7.5.1, 7.8.16, 7.9.4
<b>7.NS.A.3</b>	7.5.7, 7.5.12, 7.5.13, 7.5.14, 7.5.15, 7.5.16, 7.5.17, 7.9.3, 7.9.6
<b>7.RPA</b>	7.2.5, 7.2.9, 7.2.11, 7.2.14, 7.5.8, 7.7.16, 7.8.4, 7.8.7, 7.8.16, 7.8.20, 7.9.6, 7.9.10, 7.9.11, 7.9.12, 7.9.13
<b>7.RPA.1</b>	7.2.8, 7.4.2, 7.4.3, 7.9.5
<b>7.RPA.2</b>	7.2.2, 7.2.3, 7.2.4, 7.2.5, 7.2.6, 7.2.7, 7.2.8, 7.2.9, 7.2.10, 7.2.11, 7.2.12, 7.2.13, 7.2.14, 7.2.15, 7.3.3, 7.4.3, 7.4.4, 7.4.5, 7.5.9, 7.5.12, 7.5.14, 7.9.3, 7.9.5
<b>7.RPA.2.a</b>	7.2.2, 7.2.3, 7.2.10, 7.3.1, 7.3.3, 7.3.5, 7.3.7
<b>7.RPA.2.b</b>	7.2.2, 7.2.3, 7.2.5
<b>7.RPA.2.c</b>	7.2.4, 7.2.5, 7.2.6, 7.3.5
<b>7.RPA.2.d</b>	7.2.11
<b>7.RPA.3</b>	7.3.5, 7.4.6, 7.4.7, 7.4.8, 7.4.9, 7.4.10, 7.4.11, 7.4.12, 7.4.13, 7.4.14, 7.4.15, 7.4.16, 7.9.1, 7.9.2, 7.9.3, 7.9.4, 7.9.6, 7.9.8, 7.9.13
<b>7.SPA</b>	7.8.13, 7.8.16, 7.8.17, 7.8.20
<b>7.SPA.1</b>	7.8.12, 7.8.13, 7.8.14, 7.8.15, 7.8.20
<b>7.SPA.2</b>	7.8.13, 7.8.14, 7.8.15, 7.8.16, 7.8.17, 7.8.20
<b>7.SP.B</b>	7.8.11, 7.8.12

<b>7.SP.B.3</b>	7.8.11, 7.8.18
<b>7.SP.B.4</b>	7.8.15, 7.8.16, 7.8.18, 7.8.19, 7.8.20, 7.9.3
<b>7.SPC</b>	7.8.6
<b>7.SPC.5</b>	7.8.2, 7.8.3, 7.8.4, 7.8.5, 7.8.6
<b>7.SPC.6</b>	7.8.1, 7.8.3, 7.8.4, 7.8.5, 7.8.6
<b>7.SPC.7</b>	7.8.3, 7.8.4, 7.8.5, 7.8.14
<b>7.SPC.7.a</b>	7.8.3, 7.8.20
<b>7.SPC.7.b</b>	7.8.4, 7.8.5, 7.8.6
<b>7.SPC.8.a</b>	7.8.9
<b>7.SPC.8.b</b>	7.8.8, 7.8.9
<b>7.SPC.8.c</b>	7.8.6, 7.8.7, 7.8.10

### Unit Links

[Unit 1: Scale Drawings](#)

[Unit 2: Introducing Proportional Relationships](#)

[Unit 3: Measuring Circles](#)

[Unit 4: Proportional Relationships and Percentages](#)

[Unit 5: Rational Number Arithmetic](#)

[Unit 6: Expressions, Equations, and Inequalities](#)

[Unit 7: Angles, Triangles, and Prisms](#)

[Unit 8: Probability and Sampling](#)

Unit Title:	
Unit 1: Scale Drawings	
Relevant Standards: Bold indicates priority	
Lesson	Standards
7.1.1	7.G.A.1
7.1.2	7.G.A.1, 7.RP.A.2
7.1.3	7.G.A.1, 7.RP.A.2
7.1.4	7.G.A.1
7.1.5	7.G.A.1, 7.RP.A.2
7.1.6	7.G.A.1, 7.G.B.4, 7.G.B.6, 7.RP.A.2.a
7.1.7	7.G.A.1
7.1.8	7.G.A.1, 7.RP.A, 7.RP.A.2.b
7.1.9	7.G.A.1
7.1.10	7.G.A.1, 7.G.B.6, 7.RP.A, 7.RP.A.3
7.1.11	7.G.A.1
7.1.12	7.G.A.1
7.1.13	7.G.A.1
Unit Narrative	
<p>In this unit, students learn to understand and use the terms “scaled copy,” “to scale,” “scale factor,” “scale drawing,” and “scale,” and recognize when two pictures or plane figures are or are not scaled copies of each other. They use tables to reason about measurements in scaled copies, and recognize that angle measures are preserved in scaled copies, but lengths are scaled by a scale factor and areas by the square of the scale factor. They make, interpret, and reason about scale drawings. These include maps and floor plans that have scales with and without units.</p>	
Demonstration of Learning:	Pacing for Unit
CFA 1: Lesson 3 CFA 2: Lesson 7 CFA 3: Lesson 11 EoU: Assessment A	15 Days
Family Overview (link below)	Integration of Technology:
<a href="#">Scale Drawings</a>	<i>Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning.</i>

<b>Unit-specific Vocabulary:</b>		<b>Aligned Unit Materials, Resources, and Technology (beyond core resources):</b>
Area, corresponding, reciprocal, scale, scale drawing, scale factor, scaled copy		<ul style="list-style-type: none"> <li>• <i>DESMOS</i></li> <li>• <i>Edulastic</i></li> </ul>
<b>Connections to Prior Units:</b>		<b>Connections to Future Units:</b>
Grade 6, Unit 2; Grade 6, Unit 6		Grade 8, Unit 2
<b>Differentiation through <i>Universal Design for Learning</i></b>		
<b>UDL Indicator</b>		<b>Teacher Actions:</b>
Representation: Illustrate through multiple media		<p>Classroom materials are often dominated by information in text. But text is a weak format for presenting many concepts and for explicating most processes. Furthermore, text is a particularly weak form of presentation for learners who have text- or language-related disabilities. Providing alternatives—especially illustrations, simulations, images or interactive graphics—can make the information in text more comprehensible for any learner and accessible for some who would find it completely inaccessible in text.</p> <ul style="list-style-type: none"> <li>• Make explicit links between information provided in texts and any accompanying representation of that information in illustrations, equations, charts, or diagrams</li> </ul>
<b>Supporting Multilingual/English Learners</b>		
<b>Related <i>CELP standards:</i></b>		<b>Learning Targets:</b>
An EL can construct grade appropriate oral and written claims and support them with reasoning and evidence.		See Italicized Learning Targets/Success Criteria
<b>Lesson Sequence</b>	<b>Learning Target(s)</b>	<b>Success Criteria/ Assessment</b>
1	<ul style="list-style-type: none"> <li>• I can create a scaled copy with a given scale factor. (Lessons 1-3)</li> <li>• I can make sense of corresponding distances and angles in scaled copies. (Lessons 4-6)</li> </ul>	<p>Lesson 1: What are Scaled Copies?</p> <ul style="list-style-type: none"> <li>• I can describe some characteristics of a scaled copy.</li> <li>• I can tell whether or not a figure is a scaled copy of another figure.</li> </ul> <p>Lesson 2: Corresponding Parts and Scale Factors</p> <ul style="list-style-type: none"> <li>• <i>I can describe what the scale factor has to do with a figure and its scaled copy.</i></li> <li>• In a pair of figures, I can identify corresponding points, corresponding segments, and corresponding angles.</li> </ul> <p>Lesson 3: Making Scaled Copies</p> <ul style="list-style-type: none"> <li>• I can draw a scaled copy of a figure using a given scale factor.</li> <li>• <i>I know what operation to use on the side lengths of a figure to produce a scaled copy.</i></li> </ul>

		<p>Lesson 4: Scaled Relationships</p> <ul style="list-style-type: none"> <li>• I can use corresponding distances and corresponding angles to tell whether one figure is a scaled copy of another.</li> <li>• <i>When I see a figure and its scaled copy, I can explain what is true about corresponding angles.</i></li> <li>• <i>When I see a figure and its scaled copy, I can explain what is true about corresponding distances.</i></li> </ul> <p>Lesson 5: The Size of the Scale Factor</p> <ul style="list-style-type: none"> <li>• <i>I can describe the effect on a scaled copy when I use a scale factor that is greater than 1, less than 1, or equal to 1.</i></li> <li>• <i>I can explain how the scale factor that takes Figure A to its copy Figure B is related to the scale factor that takes Figure B to Figure A.</i></li> </ul> <p>Lesson 6: Scaling and Area</p> <ul style="list-style-type: none"> <li>• <i>I can describe how the area of a scaled copy is related to the area of the original figure and the scale factor that was used.</i></li> </ul>
2	<ul style="list-style-type: none"> <li>• I can use scale drawings to find actual distances and areas. (Lessons 7-8)</li> <li>• I can calculate scale drawing distances using different scales (Lesson 9-10)</li> <li>• I can express scales with and without units (Lesson 11-12)</li> </ul>	<p>Lesson 7: Scale Drawings</p> <ul style="list-style-type: none"> <li>• <i>I can explain what a scale drawing is, and I can explain what its scale means.</i></li> <li>• I can use actual distances and a scale to find scaled distances.</li> <li>• I can use a scale drawing and its scale to find actual distances.</li> </ul> <p>Lesson 8: Scale Drawings and Maps</p> <ul style="list-style-type: none"> <li>• I can use a map and its scale to solve problems about traveling.</li> </ul> <p>Lesson 9: Creating Scale Drawings</p> <ul style="list-style-type: none"> <li>• I can determine the scale of a scale drawing when I know lengths on the drawing and corresponding actual lengths.</li> <li>• I know how different scales affect the lengths in the scale drawing.</li> <li>• <i>When I know the actual measurements, I can create a scale drawing at a given scale.</i></li> </ul> <p>Lesson 10: Changing Scales in Scale Drawings</p> <ul style="list-style-type: none"> <li>• <i>Given a scale drawing, I can create another scale drawing that shows the same thing at a different scale.</i></li> <li>• I can use a scale drawing to find actual areas.</li> </ul> <p>Lesson 11: Scales without Units</p> <ul style="list-style-type: none"> <li>• I can explain the meaning of scales expressed without units.</li> <li>• I can use scales without units to find scaled distances or actual distances.</li> </ul> <p>Lesson 12: Units in Scale Drawings</p> <ul style="list-style-type: none"> <li>• <i>I can tell whether two scales are equivalent.</i></li> <li>• <i>I can write scales with units as scales without units.</i></li> </ul>

3	<ul style="list-style-type: none"><li>• I can create a scale drawing of my classroom.</li></ul>	Lesson 13: Draw It to Scale <ul style="list-style-type: none"><li>• When given requirements on drawing size, I can choose an appropriate scale to represent an actual object.</li></ul>
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**Unit Title:**

Unit 2: Introducing Proportional Relationships

**Relevant Standards: Bold indicates priority**

Lesson	Standards
7.2.1	7.G.A.1, 7.RP.A
7.2.2	7.RP.A.2, 7.RP.A.2.a, 7.RP.A.2.b
7.2.3	7.RP.A.2, 7.RP.A.2.a, 7.RP.A.2.b
7.2.4	7.RP.A.2, 7.RP.A.2.c
7.2.5	7.RP.A, 7.RP.A.2, 7.RP.A.2.b, 7.RP.A.2.c
7.2.6	7.RP.A.2, 7.RP.A.2.c
7.2.7	7.RP.A.1, 7.RP.A.2
7.2.8	7.G.B.6, 7.RP.A.1, 7.RP.A.2
7.2.9	7.RP.A, 7.RP.A.2
7.2.10	7.RP.A.2, 7.RP.A.2.a
7.2.11	7.RP.A, 7.RP.A.2, 7.RP.A.2.d
7.2.12	7.RP.A.1, 7.RP.A.2
7.2.13	7.EE.A, 7.RP.A.2
7.2.14	7.RP.A, 7.RP.A.2
7.2.15	7.RP.A.2

**Unit Narrative:**

In this unit, students learn to understand and use the terms “proportional,” “constant of proportionality,” and “proportional relationship,” and recognize when a relationship is or is not proportional. They represent proportional relationships with tables, equations, and graphs. Students use these terms and representations in reasoning about situations that involve constant speed, unit pricing, and measurement conversions.

**Demonstration of Learning:**

CFA 1: Lesson 3 + “what does it represent? For #3”  
 CFA 2: Lesson 7  
 CFA 3: Lesson 11  
 EoU: Assessment A

**Pacing for Unit**

18 Days

**Family Overview (link below)****Integration of Technology:**

<a href="#">Introducing Proportional Relationships</a>		<i>Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning</i>
<b>Unit-specific Vocabulary:</b>		<b>Aligned Unit Materials, Resources, and Technology (beyond core resources):</b>
Area, constant of proportionality, coordinate plane, corresponding, equivalent ratios, origin, proportional relationship, reciprocal, scale, scale drawing, scale factor, scaled copy,		<ul style="list-style-type: none"> <li>• DESMOS</li> <li>• Edulastic</li> </ul>
<b>Connections to Prior Units:</b>		<b>Connections to Future Units:</b>
Grade 6, Unit 3; Grade 6, Unit 6		Grade 7, Unit 3; Grade 7, Unit 4
<b>Differentiation through <a href="#">Universal Design for Learning</a></b>		
<b>UDL Indicator</b>		<b>Teacher Actions:</b>
Representation: Illustrate through multiple media		<p>Classroom materials are often dominated by information in text. But text is a weak format for presenting many concepts and for explicating most processes. Furthermore, text is a particularly weak form of presentation for learners who have text- or language-related disabilities. Providing alternatives—especially illustrations, simulations, images or interactive graphics—can make the information in text more comprehensible for any learner and accessible for some who would find it completely inaccessible in text.</p> <ul style="list-style-type: none"> <li>• Make explicit links between information provided in texts and any accompanying representation of that information in illustrations, equations, charts, or diagrams</li> </ul>
<b>Supporting Multilingual/English Learners</b>		
<b>Related <a href="#">CELP standards:</a></b>		<b>Learning Targets:</b>
An EL can construct grade appropriate oral and written claims and support them with reasoning and evidence.		See Italicized Learning Targets/Success Criteria
<b>Lesson Sequence</b>	<b>Learning Target</b>	<b>Success Criteria/Assessment</b>
1	<ul style="list-style-type: none"> <li>• I can make sense of representations showing equivalent ratios. (Lessons 1-3)</li> </ul>	<p>Lesson 1: One of These Things Is Not Like the Others</p> <ul style="list-style-type: none"> <li>• I can use equivalent ratios to describe scaled copies of shapes.</li> <li>• I know that two recipes will taste the same if the ingredients are in equivalent ratios.</li> </ul> <p>Lesson 2: Introducing Proportional Relationships with Tables</p> <ul style="list-style-type: none"> <li>• <i>I can use a table to reason about two quantities that are in a proportional relationship.</i></li> <li>• I understand the terms proportional relationship and constant of proportionality.</li> </ul>

		<p>Lesson 3: More about Constant of Proportionality</p> <ul style="list-style-type: none"> <li>• I can find missing information in a proportional relationship using a table.</li> <li>• <i>I can find the constant of proportionality from information given in a table.</i></li> </ul>
2	<ul style="list-style-type: none"> <li>• I can explain how equations can represent proportional relationships (Lesson 4 &amp; 5)</li> <li>• I can compare approaches to solving problems involving proportional relationships (Lesson 6)</li> </ul>	<p>Lesson 4: Proportional Relationships and Equations</p> <ul style="list-style-type: none"> <li>• <i>I can write an equation of the form <math>y = kx</math> to represent a proportional relationship described by a table or a story.</i></li> <li>• I can write the constant of proportionality as an entry in a table.</li> </ul> <p>Lesson 5: Two Equations for Each Relationship</p> <ul style="list-style-type: none"> <li>• I can find two constants of proportionality for a proportional relationship.</li> <li>• I can write two equations representing a proportional relationship described by a table or story.</li> </ul> <p>Lesson 6: Using Equations to Solve Problems</p> <ul style="list-style-type: none"> <li>• I can find missing information in a proportional relationship using the constant of proportionality.</li> <li>• <i>I can relate all parts of an equation like <math>y = kx</math> to the situation it represents.</i></li> </ul>
3	<ul style="list-style-type: none"> <li>• I can interpret situations involving proportional relationships (Lesson 7)</li> <li>• I can compare proportional relationships with nonproportional relationships using tables and equations. (Lesson 8 &amp; 9)</li> </ul>	<p>Lesson 7: Comparing Relationships with Tables</p> <ul style="list-style-type: none"> <li>• <i>I can decide if a relationship represented by a table could be proportional and when it is definitely not proportional.</i></li> </ul> <p>Lesson 8: Comparing Relationships with Equations</p> <ul style="list-style-type: none"> <li>• <i>I can decide if a relationship represented by an equation is proportional or not.</i></li> </ul> <p>Lesson 9: Solving Problems about Proportional Relationships</p> <ul style="list-style-type: none"> <li>• <i>I can ask questions about a situation to determine whether two quantities are in a proportional relationship.</i></li> <li>• I can solve all kinds of problems involving proportional relationships.</li> </ul>
4	<ul style="list-style-type: none"> <li>• I can compare tables, descriptions, and graphs representing the same situations (Lesson 10)</li> <li>• I can interpret how a graph represents features of a situation (Lesson 11)</li> <li>• I can compare graphs of proportional relationships (Lesson 12)</li> <li>• I can explain how a constant of proportionality is represented by graphs and tables (Lesson 13)</li> </ul>	<p>Lesson 10: Introducing Graphs of Proportional Relationships</p> <ul style="list-style-type: none"> <li>• I know that the graph of a proportional relationship lies on a line through.</li> </ul> <p>Lesson 11: Interpreting Graphs of Proportional Relationships</p> <ul style="list-style-type: none"> <li>• I can draw the graph of a proportional relationship given a single point on the graph (other than the origin).</li> <li>• I can find the constant of proportionality from a graph. I understand the information given by graphs of proportional relationships that are made up of points or a line.</li> </ul> <p>Lesson 12: Using Graphs to Compare Relationships</p>

		<ul style="list-style-type: none"> <li>• <i>I can compare two, related proportional relationships based on their graphs.</i></li> <li>• I know that the steeper graph of two proportional relationships has a larger constant of proportionality.</li> </ul> <p>Lesson 13: Two Graphs for Each Relationship</p> <ul style="list-style-type: none"> <li>• <i>I can interpret a graph of a proportional relationship using the situation.</i></li> <li>• I can write an equation representing a proportional relationship from a graph.</li> </ul>
5	<ul style="list-style-type: none"> <li>• I can make connections between the graphs, tables, and equations of a proportional relationship. (Lessons 14 &amp; 15)</li> </ul>	<p>Lesson 14: Four Representations</p> <ul style="list-style-type: none"> <li>• I can use units to help me understand information about proportional relationships.</li> </ul> <p>Lesson 15: Using Water Efficiently</p> <ul style="list-style-type: none"> <li>• <i>I can answer a question by representing a situation using proportional relationships.</i></li> </ul>

**Unit Title:**

Unit 3: Measuring Circles

**Relevant Standards: Bold indicates priority**

Lesson	Standards
7.3.1	7.G.B.4, 7.RP.A.2.a, 7.RP.A.3
7.3.2	7.G.A, 7.G.A.2, 7.G.B.4
7.3.3	7.G.B.4, 7.RP.A.2, 7.RP.A.2.a
7.3.4	7.G.B.4
7.3.5	7.G.B.4, 7.RP.A.2.a, 7.RP.A.2.c, 7.RP.A.3
7.3.6	7.G.A.1, 7.G.B, 7.G.B.6
7.3.7	7.G.A, 7.G.B, 7.G.B.4, 7.RP.A.2.a
7.3.8	7.G.B.4
7.3.9	7.G.B.4
7.3.10	7.G.B.4
7.3.11	7.EE.B.3, 7.G.A.1, 7.G.B.4

**Unit Narrative:**

In this unit, students learn to understand and use the term “circle” to mean the set of points that are equally distant from a point called the “center.” They gain an understanding of why the circumference of a circle is proportional to its diameter, with constant of proportionality  $\pi$ . They see informal derivations of the fact that the area of a circle is equal to  $\pi$  times the square of its radius. Students use the relationships of circumference, radius, diameter, and area of a circle to find lengths and areas, expressing these in terms of  $\pi$  or using appropriate approximations to express them numerically.

**Demonstration of Learning:**

CFA 1: Lesson 3  
 CFA 2: Lesson 8/9 combo (add in “find the area **and perimeter**”)  
 EoU: Assessment A

**Pacing for Unit**

13 Days

**Family Overview (link below)**

[Measuring Circles](#)

**Integration of Technology:**

*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):**

Area, area of a circle, circle, circumference, constant of proportionality, coordinate plane, corresponding, diameter, equivalent ratios, origin, pi, proportional relationship, radius, reciprocal, scale, scale drawing, scale factor, scaled copy, squared		<ul style="list-style-type: none"> <li>• DESMOS</li> <li>• Edulastic</li> </ul>
<b>Connections to Prior Units:</b>		<b>Connections to Future Units:</b>
Grade 6, Unit 1		Grade 8, Unit 5
<b>Differentiation through <a href="#">Universal Design for Learning</a></b>		
<b>UDL Indicator</b>	<b>Teacher Actions:</b>	
Representation: Illustrate through multiple media	<p>Classroom materials are often dominated by information in text. But text is a weak format for presenting many concepts and for explaining most processes. Furthermore, text is a particularly weak form of presentation for learners who have text- or language-related disabilities. Providing alternatives—especially illustrations, simulations, images or interactive graphics—can make the information in text more comprehensible for any learner and accessible for some who would find it completely inaccessible in text.</p> <ul style="list-style-type: none"> <li>• Make explicit links between information provided in texts and any accompanying representation of that information in illustrations, equations, charts, or diagrams</li> </ul>	
<b>Supporting Multilingual/English Learners</b>		
<b>Related <a href="#">CELP standards:</a></b>		<b>Learning Targets:</b>
An EL can construct grade appropriate oral and written claims and support them with reasoning and evidence.		See Italicized Learning Targets/Success Criteria
<b>Lesson Sequence</b>	<b>Learning Target</b>	<b>Success Criteria/Assessment</b>
1	<p>I can explain the relationship between circumference, radius and diameter (Lesson 1-3)</p> <p>I can solve problems involving circumference, perimeter and rotations (Lesson 4 &amp; 5)</p>	<p>Lesson 1: How Well Can You Measure?</p> <ul style="list-style-type: none"> <li>• I can examine quotients and use a graph to decide whether two associated quantities are in a proportional relationship.</li> <li>• <i>I understand that it can be difficult to measure the quantities in a proportional relationship accurately.</i></li> </ul> <p>Lesson 2: Exploring Circles</p> <ul style="list-style-type: none"> <li>• <i>I can describe the characteristics that make a shape a circle.</i></li> <li>• I can identify the diameter, center, radius, and circumference of a circle.</li> </ul> <p>Lesson 3: Exploring Circumference</p> <ul style="list-style-type: none"> <li>• <i>I can describe the relationship between circumference and diameter of any circle.</i></li> <li>• <i>I can explain what <math>\pi</math> means.</i></li> </ul> <p>Lesson 4: Applying Circumference</p>

		<ul style="list-style-type: none"> <li>• I can choose an approximation for <math>\pi</math> based on the situation or problem.</li> <li>• If I know the radius, diameter, or circumference of a circle, I can find the other two.</li> </ul> <p>Lesson 5: Circumference and Wheels</p> <ul style="list-style-type: none"> <li>• If I know the radius or diameter of a wheel, I can find the distance the wheel travels in some number of revolutions.</li> </ul>
2	<p>I can calculate the areas of circles using relationships between components of circles. (Lesson 6 - 8)</p> <p>I can justify reasoning about areas of curved figures (Lesson 9)</p>	<p>Lesson 6: Estimating Areas</p> <ul style="list-style-type: none"> <li>• I can calculate the area of a complicated shape by breaking it into shapes whose area I know how to calculate.</li> </ul> <p>Lesson 7: Exploring the Area of a Circle</p> <ul style="list-style-type: none"> <li>• If I know a circle's radius or diameter, I can find an approximation for its area.</li> <li>• <i>I know whether or not the relationship between the diameter and area of a circle is proportional and can explain how I know.</i></li> </ul> <p>Lesson 8: Relating Area to Circumference</p> <ul style="list-style-type: none"> <li>• <i>I can explain how the area of a circle and its circumference are related to each other.</i></li> <li>• I know the formula for area of a circle.</li> </ul> <p>Lesson 9: Applying Area of Circles</p> <ul style="list-style-type: none"> <li>• I can calculate the area of more complicated shapes that include fractions of circles.</li> <li>• I can write exact answers in terms of <math>\pi</math>.</li> </ul>
3	<p>I can identify and solve problems involving circumference and area formulas. (Lesson 10 -11)</p>	<p>Lesson 10: Distinguishing Circumference and Area</p> <ul style="list-style-type: none"> <li>• <i>I can decide whether a situation about a circle has to do with area or circumference.</i></li> <li>• I can use formulas for circumference and area of a circle to solve problems.</li> </ul> <p>Lesson 11: Stained-Glass Windows</p> <ul style="list-style-type: none"> <li>• <i>I can apply my understanding of area and circumference of circles to solve more complicated problems.</i></li> </ul>

**Unit Title:**

Unit 4: Proportional Relationships and Percentages

**Relevant Standards: Bold indicates priority**

Lesson	Standards
7.4.1	7.RP.A, 7.RP.A.1, 7.RP.A.2.a
7.4.2	7.RP.A, 7.RP.A.1
7.4.3	7.RP.A.1, 7.RP.A.2
7.4.4	7.EE.A.1, 7.RP.A.2, 7.RP.A.3
7.4.5	7.NS.A.2.d, 7.RP.A.2, 7.RP.A.3
7.4.6	7.RP.A.3
7.4.7	7.RP.A.3
7.4.8	7.RP.A.3
7.4.9	7.RP.A.3
7.4.10	7.RP.A.3
7.4.11	7.RP.A.3
7.4.12	7.RP.A.3
7.4.13	7.RP.A.3
7.4.14	7.RP.A.3
7.4.15	7.RP.A.3
7.4.16	7.RP.A.3

**Unit Narrative:**

In this unit, students use ratios, scale factors, unit rates (also called constants of proportionality), and proportional relationships to solve multi-step, real-world problems that involve fractions and percentages. They use long division to write fractions presented in the form  $\frac{a}{b}$  as decimals, e.g.  $\frac{11}{35} = 0.\overline{36}$ . They learn to understand and use the terms “repeating decimal,” “terminating decimal,” “percent increase,” “percent decrease,” “percent error,” and “measurement error.” They represent amounts and corresponding percent rates with double number line diagrams and tables. They use these terms and representations in reasoning about situations involving sales taxes, tips, markdowns, markups, sales commissions, interest, depreciation, and scaling a picture. Students use equations to represent proportional relationships in which the constant of proportionality arises from a percentage, e.g., relationship between price paid and amount of sales tax paid.

**Demonstration of Learning:****Pacing for Unit**

CFA 1: Lesson 4 CFA 2: Lesson 8 CFA 3: Lesson 11 EoU: Assessment A	19 Days
<b>Family Overview (link below)</b>	<b>Integration of Technology:</b>
<a href="#">Proportional Relationships and Percentages</a>	<i>Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning</i>
<b>Unit-specific Vocabulary:</b>	<b>Aligned Unit Materials, Resources, and Technology (beyond core resources):</b>
Area, area of a circle, circle, circumference, constant of proportionality, coordinate plane, corresponding, diameter, equivalent ratios, long division, measurement error, origin, percent error, percentage, percentage, percentage decrease, percentage increases, pi, proportional relationship, radius, reciprocal, repeating decimal, scale, scale drawing, scaled copy, squared, tape diagram, unit rate	<ul style="list-style-type: none"> <li>• DESMOS</li> <li>• Edulastic</li> </ul>
<b>Connections to Prior Units:</b>	<b>Connections to Future Units:</b>
Grade 6, Unit 5	Grade 7, Unit 8
<b>Differentiation through <a href="#">Universal Design for Learning</a></b>	
<b>UDL Indicator</b>	<b>Teacher Actions:</b>
<b>Representation:</b> Clarify syntax and structure	<p>Single elements of meaning (like words or numbers) can be combined to make new meanings. Those new meanings, however, depend upon understanding the rules or structures (like syntax in a sentence or the properties of equations) of how those elements are combined. When the syntax of a sentence or the structure of a graphical representation is not obvious or familiar to learners, comprehension suffers. To ensure that all learners have equal access to information, provide alternative representations that clarify, or make more explicit, the syntactic or structural relationships between elements of meaning.</p> <ul style="list-style-type: none"> <li>• Clarify unfamiliar syntax (in language or in math formulas) or underlying structure (in diagrams, graphs, illustrations, extended expositions or narratives) through alternatives that:</li> <li>• Highlight structural relations or make them more explicit</li> <li>• Make connections to previously learned structures</li> <li>• Make relationships between elements explicit (e.g., highlighting the transition words in an essay, links between ideas in a concept map, etc.)</li> </ul>
<b>Supporting Multilingual/English Learners</b>	
<b>Related <a href="#">CELP standards:</a></b>	<b>Learning Targets:</b>
An EL can construct grade appropriate oral and	See Italicized Learning Targets/Success Criteria

written claims and support them with reasoning and evidence.		
Lesson Sequence	Learning Target	Success Criteria/Assessment
1	<p>I can explain how to solve concrete and abstract problems involving an amount plus (or minus) a fraction of that amount (Lesson 1-3)</p> <p>I can write and solve equations to represent percent change. (Lessons 4 &amp; 5)</p>	<p>Lesson 1: Lots of Flags</p> <ul style="list-style-type: none"> <li>I can find dimensions on scaled copies of a rectangle.</li> <li>I remember how to compute percentages.</li> </ul> <p>Lesson 2: Ratios and Rates With Fractions</p> <ul style="list-style-type: none"> <li>I can solve problems about ratios of fractions and decimals.</li> </ul> <p>Lesson 3: Revisiting Proportional Relationships</p> <ul style="list-style-type: none"> <li>I can use a table with 2 rows and 2 columns to find an unknown value in a proportional relationship.</li> <li><i>When there is a constant rate, I can identify the two quantities that are in a proportional relationship.</i></li> </ul> <p>Lesson 4: Half as Much Again</p> <ul style="list-style-type: none"> <li>I can use the distributive property to rewrite an expression like <math>x + \frac{1}{2}x</math> as <math>(1 + \frac{1}{2})x</math>.</li> <li><i>I understand that “half as much again” and “multiply by <math>\frac{3}{2}</math>” mean the same thing.</i></li> </ul> <p>Lesson 5: Say It with Decimals</p> <ul style="list-style-type: none"> <li>I can use the distributive property to rewrite an equation like <math>x + 0.5x = 1.5x</math>.</li> <li><i>I can write fractions as decimals. I understand that “half as much again” and “multiply by 1.5” mean the same thing.</i></li> </ul>
2	<p>I can explain how to solve percent change problems (Lesson 6)</p> <p>I can interpret and represent concrete problems involving percent increase and decrease (Lesson 7 &amp; 8)</p> <p>I can explain strategies for solving percent problems with fractional percentages (Lesson 9)</p>	<p>Lesson 6: Increasing and Decreasing</p> <ul style="list-style-type: none"> <li>I can draw a tape diagram that represents a percent increase or decrease.</li> <li>When I know the starting amount and the percent increase or decrease, I can find the new amount.</li> </ul> <p>Lesson 7: One Hundred Percent</p> <ul style="list-style-type: none"> <li>I can use a double number line diagram to help me solve percent increase and decrease problems.</li> <li><i>I understand that if I know how much a quantity has grown, then the original amount represents 100%.</i></li> <li>When I know the new amount and the percentage of increase or decrease, I can find the original amount.</li> </ul> <p>Lesson 8: Percent Increase and Decrease with Equations</p> <ul style="list-style-type: none"> <li><i>I can solve percent increase and decrease problems by writing an equation to represent the situation and solving it.</i></li> </ul> <p>Lesson 9: More and Less than 1%</p> <ul style="list-style-type: none"> <li>I can find percentages of quantities like 12.5% and 0.4%.</li> <li><i>I understand that to find 0.1% of an amount I have to multiply by 0.001.</i></li> </ul>
3	I can solve problems involving different real world elements of sales. (Lesson 10-12)	<p>Lesson 10: Tax and Tip</p> <ul style="list-style-type: none"> <li><i>I understand and can solve problems about sales tax and tip.</i></li> </ul> <p>Lesson 11: Percentage Contexts</p> <ul style="list-style-type: none"> <li><i>I understand and can solve problems about commission, interest, markups, and discounts.</i></li> </ul>

	I can explain strategies and solve concrete situations involving percent error (Lesson 13 - 15)	<p>Lesson 12: Finding the Percentage</p> <ul style="list-style-type: none"> <li>I can find the percentage increase or decrease when I know the original amount and the new amount.</li> </ul> <p>Lesson 13: Measurement Error</p> <ul style="list-style-type: none"> <li>I can represent measurement error as a percentage of the correct measurement.</li> <li><i>I understand that all measurements include some error.</i></li> </ul> <p>Lesson 14: Percent Error</p> <ul style="list-style-type: none"> <li>I can solve problems that involve percent error.</li> </ul> <p>Lesson 15: Error Intervals</p> <ul style="list-style-type: none"> <li>I can find a range of possible values for a quantity if I know the maximum percent error and the correct value.</li> </ul>
4	I can represent situations from the news involving percent change (Lesson 16)	<p>Lesson 16: Posing Percentage Problems</p> <ul style="list-style-type: none"> <li><i>I can write and solve problems about real-world situations that involve percent increase and decrease.</i></li> </ul>

**Unit Title:**

Unit 5: Rational Number Arithmetic

**Relevant Standards: Bold indicates priority**

Lesson	Standards
7.5.1	7.NS.A.1, 7.NS.A.1.b, 7.NS.A.1.c, 7.NS.A.2.d
7.5.2	7.NS.A.1, 7.NS.A.1.a, 7.NS.A.1.b
7.5.3	7.NS.A.1.a, 7.NS.A.1.b, 7.NS.A.1.c, 7.NS.A.1.d
7.5.4	7.NS.A.1
7.5.5	7.NS.A.1, 7.NS.A.1.c
7.5.6	7.NS.A.1, 7.NS.A.1.c
7.5.7	7.EE.B.4, 7.NS.A.1.c, 7.NS.A.3
7.5.8	7.NS.A.2.a, 7.RP.A
7.5.9	7.NS.A.2, 7.NS.A.2.a, 7.NS.A.2.c, 7.RP.A.2
7.5.10	7.EE.B, 7.NS.A.2.c
7.5.11	7.EE.B.4.a, 7.NS.A.2, 7.NS.A.2.b
7.5.12	7.EE.B.3, 7.NS.A.3, 7.RP.A.2
7.5.13	7.NS.A, 7.NS.A.3
7.5.14	7.EE.B.4.a, 7.NS.A.3, 7.RP.A.2
7.5.15	7.EE.B, 7.EE.B.4, 7.EE.B.4.a, 7.NS.A.3
7.5.16	7.EE.B.4.a, 7.NS.A.3
7.5.17	7.EE.B.3, 7.NS.A.3

**Unit Narrative:**

In this unit, students interpret signed numbers in contexts (e.g., temperature, elevation, deposit and withdrawal, position, direction, speed and velocity, percent change) together with their sums, differences, products, and quotients. (“Signed numbers” include all rational numbers, written as decimals or in the form  $\frac{a}{b}$ ) Students use tables and number line diagrams to represent sums and differences of signed numbers or changes in quantities represented by signed numbers such as temperature or elevation, becoming more fluent in writing different numerical addition and subtraction equations that express the same relationship. They compute sums and differences of signed numbers. They plot points in the plane with signed number coordinates, representing and interpreting sums and differences of coordinates. They view situations in which objects are traveling at constant speed (familiar from previous units) as proportional relationships. For these situations, students use multiplication equations to represent changes in position on number line diagrams or distance traveled, and interpret positive and negative velocities in context. They become more fluent in writing different numerical multiplication and division equations for the same relationship. Students extend their use of the “next to” notation (which they used in expressions such as  $5x$  and  $6(3 + 2)$  in grade 6) to include negative numbers and products of numbers, e.g.,

writing and rather than $(-5) \cdot (x)$ and $(-5) \cdot (-10)$ . They extend their use of the fraction bar to include variables as well as numbers, writing $-8.5 \div x$ as well as $\frac{-8.5}{x}$ .	
<b>Demonstration of Learning:</b>	<b>Pacing for Unit</b>
CFA 1: Lesson 3 CFA 2: Lesson 6 CFA 3: Lesson 12 CFA 4: Lesson 15 EoU: Version B	20 Days
<b>Family Overview (link below)</b>	<b>Integration of Technology:</b>
<a href="#">Rational Number Arithmetic</a>	<i>Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning</i>
<b>Unit-specific Vocabulary:</b>	<b>Aligned Unit Materials, Resources, and Technology (beyond core resources):</b>
Absolute value, area, area of a circle, circumference, constant of proportionality, coordinate plane, corresponding, deposit, diameter, equivalent ratios, long division, measurement error, negative number, origin, percent error, percentage, percentage decrease, percentage increase, pi, positive number, proportional relationship, radius, rational number, reciprocal, scale, scale drawing, scale factor, scaled copy, solution to an equation, squared, tape diagram, unit rate, variable, withdrawal	<ul style="list-style-type: none"> <li>• DESMOS</li> <li>• Edulastic</li> </ul>
<b>Connections to Prior Units:</b>	<b>Connections to Future Units:</b>
Grade 6, Unit 7	Grade 8, Unit 3
<b>Differentiation through <a href="#">Universal Design for Learning</a></b>	
<b>UDL Indicator</b>	<b>Teacher Actions:</b>
Support decoding of text, mathematical notation, and symbols	<p>The ability to fluently decode words, numbers or symbols that have been presented in an encoded format (e.g., visual symbols for text, haptic symbols for Braille, algebraic expressions for relationships) takes practice for any learner, but some learners will reach automaticity more quickly than others. Learners need consistent and meaningful exposure to symbols so that they can comprehend and use them effectively.</p> <ul style="list-style-type: none"> <li>• Allow for flexibility and easy access to multiple representations of notation where appropriate (e.g., formulas, word problems, graphs)</li> <li>• Offer clarification of notation through lists of key terms</li> </ul>

Supporting Multilingual/English Learners		
Related <i>CELP standards:</i>		Learning Targets:
An EL can construct grade appropriate oral and written claims and support them with reasoning and evidence.		See Italicized Learning Targets/Success Criteria
Lesson Sequence	Learning Target	Success Criteria/Assessment
1	I can interpret situations involving signed numbers (Lesson 1)	Lesson 1: Interpreting Negative Numbers <ul style="list-style-type: none"> <li>I can compare rational numbers.</li> <li>I can use rational numbers to describe temperature and elevation.</li> </ul>
2	<p>I can represent addition of signed numbers on a number line and interpret them in tables. (Lesson 2 &amp; 3)</p> <p>I can interpret real world scenarios with signed numbers (Lesson 4)</p> <p>I can generalize about subtracting and adding signed numbers (Lesson 5)</p> <p>I can represent changes in elevation and generalize about differences and magnitude (Lesson 6 &amp; 7)</p>	<p>Lesson 2: Changing Temperatures</p> <ul style="list-style-type: none"> <li>I can use a number line to add positive and negative numbers.</li> </ul> <p>Lesson 3: Changing Elevation</p> <ul style="list-style-type: none"> <li>I understand how to add positive and negative numbers in general.</li> </ul> <p>Lesson 4: Money and Debts</p> <ul style="list-style-type: none"> <li>I understand what positive and negative numbers mean in a situation involving money.</li> </ul> <p>Lesson 5: Representing Subtraction</p> <ul style="list-style-type: none"> <li>I can explain the relationship between addition and subtraction of rational numbers.</li> <li>I can use a number line to subtract positive and negative numbers.</li> </ul> <p>Lesson 6: Subtracting Rational Numbers</p> <ul style="list-style-type: none"> <li>I can find the difference between two rational numbers.</li> <li>I understand how to subtract positive and negative numbers in general.</li> </ul> <p>Lesson 7: Adding and Subtracting to Solve Problems</p> <ul style="list-style-type: none"> <li>I can solve problems that involve adding and subtracting rational numbers.</li> </ul>
3	<p>I can represent position, speed, and direction (Lesson 8)</p> <p>I can generalize about multiplying and dividing negative numbers (Lesson 9-12)</p> <p>I can represent situations involving signed numbers and negative rates (Lessons 12)</p>	<p>Lesson 8: Position, Speed, and Direction</p> <ul style="list-style-type: none"> <li>I can multiply a positive number with a negative number.</li> <li>I can use rational numbers to represent speed and direction.</li> </ul> <p>Lesson 9: Multiplying Rational Numbers</p> <ul style="list-style-type: none"> <li>I can explain what it means when time is represented with a negative number in a situation about speed and direction.</li> <li>I can multiply two negative numbers.</li> </ul> <p>Lesson 10: Multiply!</p> <ul style="list-style-type: none"> <li>I can solve problems that involve multiplying rational numbers.</li> </ul> <p>Lesson 11: Dividing Rational Numbers</p> <ul style="list-style-type: none"> <li>I can divide rational numbers.</li> </ul> <p>Lesson 12: Negative Rates</p>

		<ul style="list-style-type: none"> <li>• I can solve problems that involve multiplying and dividing rational numbers.</li> <li>• I can solve problems that involve negative rates.</li> </ul>
4	I can solve problems using the four operations with rational numbers. (Lesson 13 & 14)	<p>Lesson 13: Expressions with Rational Numbers</p> <ul style="list-style-type: none"> <li>• I can add, subtract, multiply, and divide rational numbers.</li> <li>• I can evaluate expressions that involve rational numbers.</li> </ul> <p>Lesson 14: Solving Problems with Rational Numbers</p> <ul style="list-style-type: none"> <li>• I can represent situations with expressions that include rational numbers.</li> </ul>
5	<p>I can generalize about additive and multiplicative inverses (Lesson 15)</p> <p>I can write and solve equations to represent situations that involve rational numbers. (Lesson 16)</p>	<p>Lesson 15: Solving Equations with Rational Numbers</p> <ul style="list-style-type: none"> <li>• I can solve equations that include rational numbers and have rational solutions.</li> </ul> <p>Lesson 16: Representing Contexts with Equations</p> <ul style="list-style-type: none"> <li>• I can explain what the solution to an equation means for the situation.</li> </ul>
6	I can solve real world scenarios using rational numbers and percentages. (Lesson 17)	<p>Lesson 17: The Stock Market</p> <ul style="list-style-type: none"> <li>• I can solve problems about the stock market using rational numbers and percentages.</li> </ul>

**Unit Title:**

Unit 6: Expressions, Equations, and Inequalities

**Relevant Standards: Bold indicates priority**

Lesson	Standards
7.6.1	7.EE.B, 7.EE.B.4, 7.EE.B.4.a
7.6.2	7.EE.B.3, 7.EE.B.4
7.6.3	7.EE.B.3, 7.EE.B.4
7.6.4	7.EE.B.3, 7.EE.B.4.a
7.6.5	7.EE.B.3, 7.EE.B.4, 7.EE.B.4.a
7.6.6	7.EE.B.3, 7.EE.B.4.a
7.6.7	7.EE.B.4.a
7.6.8	7.EE.B.4.a
7.6.9	7.EE.B.4, 7.EE.B.4.a
7.6.10	7.EE.B.4.a
7.6.11	7.EE.B.3, 7.EE.B.4, 7.EE.B.4.a
7.6.12	7.EE.A.2, 7.EE.B.3, 7.EE.B.4, 7.EE.B.4.a
7.6.13	7.EE.B.4, 7.EE.B.4.b
7.6.14	7.EE.B.4.b
7.6.15	7.EE.B.4, 7.EE.B.4.b
7.6.16	7.EE.B.4.b
7.6.17	7.EE.B.4.b
7.6.18	7.EE.A.1, 7.NS.A.1, 7.NS.A.1.c
7.6.19	7.EE.A.1
7.6.20	7.EE.A.1
7.6.21	7.EE.A.1
7.6.22	7.EE.A.1

**Unit Narrative:**

In this unit, students solve equations of the forms  $px + q = r$  and  $p(x + q) = r$  where  $p, q,$  and  $r$  are rational numbers. They draw, interpret, and write equations in one variable for balanced “hanger diagrams,” and write expressions for sequences of instructions, e.g., “number puzzles.” They use tape diagrams together with equations to represent situations with one unknown quantity. They learn algebraic methods for solving equations. Students solve linear inequalities in one variable and represent their solutions on the number line. They understand and use the terms “less than or equal to” and “greater than or equal to,” and the corresponding symbols. They generate expressions that are equivalent to a given numerical or linear expression. Students formulate and solve linear equations and inequalities that represent real-world situations.

Demonstration of Learning:	Pacing for Unit
<ul style="list-style-type: none"> <li>● CFA 1: Lesson 4&amp;5 combo</li> <li>● CFA 2: Lesson 10</li> <li>● MOU: Version A</li> <li>● CFA 3: Lesson 16</li> <li>● CFA 4: Lesson 21</li> <li>● EoU: Version B</li> </ul>	28 Days
Family Overview (link below)	Integration of Technology:
<a href="#">Expressions, Equations, and Inequalities</a>	<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>Area, area of a circle, circle, circumference, constant of proportionality, coordinate plane, corresponding, deposit, diameter, equivalent expressions, equivalent ratios, expand, factor, long division, measurement error, negative number, origin, percent error, percentage, percentage decrease, percentage increase, pi, positive number, proportional relationship, radius, rational number, reciprocal, repeating decimal, scale, scale drawing, scaled copy, solution to an equation, solution to an inequality, squared, tape diagram, term, unit rate, variable, withdrawal</p>	<p>DESMOS Edulastic</p>
Connections to Prior Units:	Connections to Future Units:
Grade 6, Unit 6	Grade 8, Unit 4
Differentiation through <a href="#">Universal Design for Learning</a>	
UDL Indicator	Teacher Actions:
Representation: Clarify vocabulary and symbols	<p>The semantic elements through which information is presented—the words, symbols, numbers, and icons—are differentially accessible to learners with varying backgrounds, languages, and lexical knowledge. To ensure accessibility for all, key vocabulary, labels, icons, and symbols should be linked to, or associated with, alternate representations of their meaning (e.g., an embedded glossary or definition, a graphic equivalent, a chart or map). Idioms, archaic expressions, culturally exclusive phrases, and slang, should be translated.</p> <ul style="list-style-type: none"> <li>● Pre-teach vocabulary and symbols, especially in ways that promote connection to the learners' experience and prior knowledge</li> <li>● Provide graphic symbols with alternative text descriptions</li> <li>● Highlight how complex terms, expressions, or equations are composed of simpler words or</li> </ul>

symbols

**Supporting Multilingual/English Learners**

**Related *CELP standards:***

An EL can construct grade appropriate oral and written claims and support them with reasoning and evidence.

**Learning Targets:**

See Italicized Learning Targets/Success Criteria

**Lesson Sequence**

**Learning Target**

**Success Criteria/Assessment**

1

I can compare stories with corresponding tables and diagrams (Lesson 1 & 2)

I can compare, draw and solve tape diagrams with corresponding equations (Lesson 3 - 5)

When I have a situation or a tape diagram, I can represent it with an equation. (Lesson 6)

Lesson 1: Relationships between Quantities

- I can think of ways to solve some more complicated word problems.

Lesson 2: Reasoning about Contexts with Tape Diagrams

- I can explain how a tape diagram represents parts of a situation and relationships between them.
- I can use a tape diagram to find an unknown amount in a situation.

Lesson 3: Reasoning about Equations with Tape Diagrams

- I can match equations and tape diagrams that represent the same situation.
- If I have an equation, I can draw a tape diagram that shows the same relationship.

Lesson 4: Reasoning about Equations and Tape Diagrams (Part 1)

- I can draw a tape diagram to represent a situation where there is a known amount and several copies of an unknown amount and explain what the parts of the diagram represent.
- I can find a solution to an equation by reasoning about a tape diagram or about what value would make the equation true.

Lesson 5: Reasoning about Equations and Tape Diagrams (Part 2)

- I can draw a tape diagram to represent a situation where there is more than one copy of the same sum and explain what the parts of the diagram represent.
- I can find a solution to an equation by reasoning about a tape diagram or about what value would make the equation true.

Lesson 6: Distinguishing between Two Types of Situations

- I understand the similarities and differences between the two main types of equations we are studying in this unit.

2

I can compare and explain strategies for hanger diagrams and equations (Lesson 7)

Lesson 7: Reasoning about Solving Equations (Part 1)

- I can explain how a balanced hanger and an equation represent the same situation.
- I can find an unknown weight on a hanger diagram and solve an equation that represents the diagram.

	<p>I can explain strategies for using hanger diagrams to solve equations (Lesson 8)</p> <p>I can explain different strategies and pathways for solving equations (Lesson 9 &amp; 10)</p> <p>I can explain reasoning about situations, tape diagrams, and equations (Lesson 11 &amp; 12)</p>	<ul style="list-style-type: none"> <li>I can write an equation that describes the weights on a balanced hanger.</li> </ul> <p>Lesson 8: Reasoning about Solving Equations (Part 2)</p> <ul style="list-style-type: none"> <li>I can explain how a balanced hanger and an equation represent the same situation.</li> <li>I can explain why some balanced hangers can be described by two different equations, one with parentheses and one without.</li> <li>I can find an unknown weight on a hanger diagram and solve an equation that represents the diagram.</li> <li>I can write an equation that describes the weights on a balanced hanger.</li> </ul> <p>Lesson 9: Dealing with Negative Numbers</p> <ul style="list-style-type: none"> <li>I can use the idea of doing the same to each side to solve equations that have negative numbers or solutions.</li> </ul> <p>Lesson 10: Different Options for Solving One Equation</p> <ul style="list-style-type: none"> <li>For an equation like <math>3(x + 2) = 15</math>, I can solve it in two different ways: by first dividing each side by 3, or by first rewriting <math>3(x + 2)</math> using the distributive property.</li> <li>For equations with more than one way to solve, I can choose the easier way depending on the numbers in the equation.</li> </ul> <p>Lesson 11: Using Equations to Solve Problems</p> <ul style="list-style-type: none"> <li>I can solve story problems by drawing and reasoning about a tape diagram or by writing and solving an equation.</li> </ul> <p>Lesson 12: Solving Problems about Percent Increase or Decrease</p> <ul style="list-style-type: none"> <li>I can solve story problems about percent increase or decrease by drawing and reasoning about a tape diagram or by writing and solving an equation.</li> </ul>
3	<p>I can write and reason about inequalities (Lesson 13 &amp; 14)</p> <p>I can justify reasoning about solutions to inequalities (Lesson 15)</p> <p>I can compare descriptions of situations with corresponding inequalities (Lesson 16)</p> <p>I can justify the need for specific information in order to write and solve inequalities (Lesson 17)</p>	<p>Lesson 13: Reintroducing Inequalities</p> <ul style="list-style-type: none"> <li>I can explain what the symbols <math>\leq</math> and <math>\geq</math> mean.</li> <li>I can represent an inequality on a number line.</li> <li>I understand what it means for a number to make an inequality true.</li> </ul> <p>Lesson 14: Finding Solutions to Inequalities in Context</p> <ul style="list-style-type: none"> <li>I can describe the solutions to an inequality by solving a related equation and then reasoning about values that make the inequality true.</li> <li>I can write an inequality to represent a situation.</li> </ul> <p>Lesson 15: Efficiently Solving Inequalities</p> <ul style="list-style-type: none"> <li>I can graph the solutions to an inequality on a number line.</li> <li>I can solve inequalities by solving a related equation and then checking which values are solutions to the original inequality.</li> </ul> <p>Lesson 16: Interpreting Inequalities</p> <ul style="list-style-type: none"> <li>I can match an inequality to a situation it represents, solve it, and then explain what the solution means in the situation.</li> <li>If I have a situation and an inequality that represents it, I can explain what the parts of the inequality mean in the situation.</li> </ul>

		<p>Lesson 17: Modeling with Inequalities</p> <ul style="list-style-type: none"> <li>I can use what I know about inequalities to solve real-world problems.</li> </ul>
4	I can explain strategies for identifying and writing equivalent expressions (Lesson 18 - 22)	<p>Lesson 18: Subtraction in Equivalent Expressions</p> <ul style="list-style-type: none"> <li>I can organize my work when I use the distributive property.</li> <li>I can re-write subtraction as adding the opposite and then rearrange terms in an expression.</li> </ul> <p>Lesson 19: Expanding and Factoring</p> <ul style="list-style-type: none"> <li>I can organize my work when I use the distributive property.</li> <li>I can use the distributive property to rewrite expressions with positive and negative numbers.</li> <li>I understand that factoring and expanding are words used to describe using the distributive property to write equivalent expressions.</li> </ul> <p>Lesson 20: Combining Like Terms (Part 1)</p> <ul style="list-style-type: none"> <li>I can figure out whether two expressions are equivalent to each other.</li> <li>When possible, I can write an equivalent expression that has fewer terms.</li> </ul> <p>Lesson 21: Combining Like Terms (Part 2)</p> <ul style="list-style-type: none"> <li>I am aware of some common pitfalls when writing equivalent expressions, and I can avoid them.</li> <li>When possible, I can write an equivalent expression that has fewer terms.</li> </ul> <p>Lesson 22: Combining Like Terms (Part 3)</p> <ul style="list-style-type: none"> <li>Given an expression, I can use various strategies to write an equivalent expression.</li> <li>When I look at an expression, I can notice if some parts have common factors and make the expression shorter by combining those parts.</li> </ul>
5	I can justify whether different sequences of calculations give the same result. (Lesson 23)	<p>Lesson 23: Applications of Expressions</p> <ul style="list-style-type: none"> <li>I can write algebraic expressions to understand and justify a choice between two options.</li> </ul>

**Unit Title:**

Unit 7: Angles, Triangles, and Prisms

**Relevant Standards: Bold indicates priority**

Lesson	Standards
7.7.2	7.G.B, 7.G.B.5
7.7.3	7.EE.A, 7.G.B.5
7.7.4	7.G.A, 7.G.B, 7.G.B.5
7.7.5	7.EE.B.4, 7.G.B.5
7.7.6	7.G.A.2, 7.NS.A.1
7.7.7	7.G.A.2
7.7.8	7.G.A.2
7.7.9	7.G.A, 7.G.A.2
7.7.10	7.G.A.2
7.7.11	7.G.A.3, 7.G.B.6
7.7.12	7.G.B.6
7.7.13	7.G.A.3, 7.G.B.6
7.7.14	7.G.B.6
7.7.15	7.G.B, 7.G.B.6
7.7.16	7.G.B, 7.G.B.6, 7.RPA
7.7.17	7.G.A.2, 7.G.B.6

**Unit Narrative:**

In this unit, students investigate whether sets of angle and side length measurements determine unique triangles or multiple triangles, or fail to determine triangles. Students also study and apply angle relationships, learning to understand and use the terms “complementary,” “supplementary,” “vertical angles,” and “unique.” The work gives them practice working with rational numbers and equations for angle relationships. Students analyze and describe cross-sections of prisms, pyramids, and polyhedra. They understand and use the formula for the volume of a right rectangular prism, and solve problems involving area, surface area, and volume.

**Demonstration of Learning:**

CFA 1: Lesson 2  
 CFA 2: Lesson 5  
 CFA 3: Lesson 9  
 CFA 4: Lesson 16  
 EoU: Version A

**Pacing for Unit**

20 Days

**Family Overview (link below)**

[Angles, Triangles and Prisms](#)

**Integration of Technology:**

*Intentionally aligned use of digital tools and resources to*

	<i>support acquisition of content, researching, organizing and communicating learning</i>
<b>Unit-specific Vocabulary:</b>	<b>Aligned Unit Materials, Resources, and Technology (beyond core resources):</b>
Absolute value, adjacent angles, area, base, circle, circumference, complementary, constant of proportionality, coordinate plane, corresponding, cross section, deposit, diameter, equivalent expressions, equivalent ratios, expand, factor, long division, measurement error, negative number, origin, percent error, percentage, percentage decrease, percentage increase, pi, positive number, prism, proportional relationship, pyramid, radius, rational number, reciprocal, repeating decimal, right triangle, scale, scale drawing, scale factor, scaled copy, solution to an equation, solution to an inequality, squared, straight angle, supplementary, tape diagram, term, unit rate, variable, vertical angles, volume, withdrawal	DESMOS Edulastic
<b>Connections to Prior Units:</b>	<b>Connections to Future Units:</b>
Grade 6, Unit 1	Grade 8, Unit 5
<b>Differentiation through <a href="#">Universal Design for Learning</a></b>	
<b>UDL Indicator</b>	<b>Teacher Actions:</b>
Representation: Highlight patterns, critical features, big ideas, and relationships	<p>One of the big differences between experts and novices in any domain is the facility with which they distinguish what is critical from what is unimportant or irrelevant. Since experts quickly recognize the most important features in information, they allocate their time efficiently, quickly identifying what is valuable and finding the right “hooks” with which to assimilate the most valuable information into existing knowledge. As a consequence, one of the most effective ways to make information more accessible is to provide explicit cues or prompts that assist individuals in attending to those features that matter most while avoiding those that matter least.</p> <ul style="list-style-type: none"> <li>• Highlight or emphasize key elements in text, graphics, diagrams, formulas</li> <li>• Use outlines, graphic organizers, unit organizer routines, concept organizer routines, and concept mastery routines to emphasize key ideas and relationships</li> <li>• Use multiple examples and non-examples to emphasize critical features</li> <li>• Use cues and prompts to draw attention to critical features</li> <li>• Highlight previously learned skills that can be used to solve unfamiliar problems</li> </ul>
<b>Supporting Multilingual/English Learners</b>	

Related <b>CELP standards:</b>		Learning Targets:
An EL can construct grade appropriate oral and written claims and support them with reasoning and evidence.		See Italicized Learning Targets/Success Criteria
Lesson Sequence	Learning Target	Success Criteria/Assessment
1	<p>I can critique reasoning about measuring angles. (Lesson 1)</p> <p>I can explain how to measure angles. (Lesson 2)</p> <p>I can interpret situations involving intersecting lines in order to form a conjecture. (Lesson 3)</p> <p>I can interpret and explain which information is relevant to find unknown angle measurements. (Lessons 4 &amp; 5)</p> <p>I can interpret and solve equations representing angle measurements. (Lesson 5)</p>	<p>Lesson 1: Relationships of Angles</p> <ul style="list-style-type: none"> <li>I can find unknown angle measures by reasoning about adjacent angles with known measures.</li> <li>I can recognize when an angle measures <math>90^\circ</math>, <math>180^\circ</math>, or <math>360^\circ</math>.</li> </ul> <p>Lesson 2: Adjacent Angles</p> <ul style="list-style-type: none"> <li>I can find unknown angle measures by reasoning about complementary or supplementary angles.</li> <li>I can recognize when adjacent angles are complementary or supplementary.</li> </ul> <p>Lesson 3: Nonadjacent Angles</p> <ul style="list-style-type: none"> <li>I can determine if angles that are not adjacent are complementary or supplementary.</li> <li>I can explain what vertical angles are in my own words.</li> </ul> <p>Lesson 4: Solving for Unknown Angles</p> <ul style="list-style-type: none"> <li>I can reason through multiple steps to find unknown angle measures.</li> <li>I can recognize when an equation represents a relationship between angle measures.</li> </ul> <p>Lesson 5: Using Equations to Solve for Unknown Angles</p> <ul style="list-style-type: none"> <li>I can write an equation to represent a relationship between angle measures and solve the equation to find unknown angle measures.</li> </ul>
2	<p>I can determine whether or not <i>shapes</i> are identical copies (Lesson 6)</p> <p>I can show whether or not 3 side lengths will make a triangle (Lesson 7 &amp; 8)</p> <p>I can justify whether or not <i>measurements</i> determine identical copies (Lesson 9)</p> <p>I can justify whether or not <i>measurements</i> determine unique triangles (Lesson 10)</p>	<p>Lesson 6: Building Polygons (Part 1)</p> <ul style="list-style-type: none"> <li>I can show that the 3 side lengths that form a triangle cannot be rearranged to form a different triangle.</li> <li>I can show that the 4 side lengths that form a quadrilateral can be rearranged to form different quadrilaterals.</li> </ul> <p>Lesson 7: Building Polygons (Part 2)</p> <ul style="list-style-type: none"> <li>I can reason about a figure with an unknown angle.</li> </ul> <p>Lesson 8: Triangles with 3 Common Measures</p> <ul style="list-style-type: none"> <li>I understand that changing which sides and angles are next to each other can make different triangles.</li> </ul> <p>Lesson 9: Drawing Triangles (Part 1)</p> <ul style="list-style-type: none"> <li>Given two angle measures and one side length, I can draw different triangles with these measurements or show that these measurements determine one unique triangle or no triangle.</li> </ul> <p>Lesson 10: Drawing Triangles (Part 2)</p> <ul style="list-style-type: none"> <li>Given two side lengths and one angle measure, I can draw different triangles with these measurements or show that these measurements determine one unique triangle or no triangle.</li> </ul>

3	<p>I can correctly identify a cross section of any three dimensional figure (Lesson 11)</p> <p>I can explain how to find the volume of prisms (Lessons 12)</p> <p>I can critique reasoning about decomposition of prisms (Lesson 13)</p> <p>I can explain and critique how to find the surface area of prisms (Lesson 14)</p> <p>I can interpret situations involving volume and surface area (Lesson 15 and 16)</p>	<p>Lesson 11: Slicing Solids</p> <ul style="list-style-type: none"> <li>I can explain that when a three dimensional figure is sliced it creates a face that is two dimensional.</li> <li>I can picture different cross sections of prisms and pyramids.</li> </ul> <p>Lesson 12: Volume of Right Prisms</p> <ul style="list-style-type: none"> <li>I can explain why the volume of a prism can be found by multiplying the area of the base and the height of the prism.</li> </ul> <p>Lesson 13: Decomposing Bases for Area</p> <ul style="list-style-type: none"> <li>I can calculate the volume of a prism with a complicated base by decomposing the base into quadrilaterals or triangles.</li> </ul> <p>Lesson 14: Surface Area of Right Prisms</p> <ul style="list-style-type: none"> <li>I can find and use shortcuts when calculating the surface area of a prism.</li> <li>I can picture the net of a prism to help me calculate its surface area.</li> </ul> <p>Lesson 15: Distinguishing Volume and Surface Area</p> <ul style="list-style-type: none"> <li>I can decide whether I need to find the surface area or volume when solving a problem about a real-world situation.</li> </ul> <p>Lesson 16: Applying Volume and Surface Area</p> <ul style="list-style-type: none"> <li>I can solve problems involving the volume and surface area of children's play structures.</li> </ul>	
4	I can build a triangular prism from scratch.	<p>Lesson 17: Building Prisms</p> <ul style="list-style-type: none"> <li>I can draw and assemble a net of a triangular prism, given two side lengths of the prism's base and one angle measure.</li> </ul>	

**Unit Title:**

Unit 8: Probability and Sampling

**Relevant Standards: Bold indicates priority**

<b>Lesson</b>	<b>Standards</b>
7.8.1	7.SPC.6
7.8.2	7.SPC.5
7.8.3	7.SPC.5, 7.SPC.6, 7.SPC.7, 7.SPC.7.a
7.8.4	7.RPA, 7.SPC.5, 7.SPC.6, 7.SPC.7, 7.SPC.7.b
7.8.5	7.SPC.5, 7.SPC.6, 7.SPC.7, 7.SPC.7.b
7.8.6	7.SPC, 7.SPC.5, 7.SPC.6, 7.SPC.7.b, 7.SPC.8.c
7.8.7	7.RPA, 7.SPC.8.c
7.8.8	7.SPC.8.b
7.8.9	7.SPC.8.a, 7.SPC.8.b
7.8.10	7.SPC.8.c
7.8.11	7.SP.B, 7.SP.B.3
7.8.12	7.SPA.1, 7.SP.B
7.8.13	7.SPA, 7.SPA.1, 7.SPA.2
7.8.14	7.SPA.1, 7.SPA.2, 7.SPC.7
7.8.15	7.SPA.1, 7.SPA.2, 7.SP.B.4
7.8.16	7.NS.A.2.d, 7.RPA, 7.SPA, 7.SPA.1, 7.SPA.2, 7.SP.B.4
7.8.17	7.SPA, 7.SPA.2
7.8.18	7.SP.B, 7.SP.B.3, 7.SP.B.4
7.8.19	7.SP.B.4
7.8.20	7.RPA, 7.SPA, 7.SPA.1, 7.SPA.2, 7.SP.B.4, 7.SPC.7.a

**Unit Narrative:**

In this unit, students understand and use the terms “event,” “sample space,” “outcome,” “chance experiment,” “probability,” “simulation,” “random,” “sample,” “random sample,” “representative sample,” “overrepresented,” “underrepresented,” “population,” and “proportion.” They design and use simulations to estimate probabilities of outcomes of chance experiments and understand the probability of an outcome as its long-run relative frequency. They represent sample spaces (that is, all possible outcomes of a chance experiment) in tables and tree diagrams and as lists. They calculate the number of outcomes in a given sample space to find the probability of a given event. They consider the strengths and weaknesses of different methods for obtaining a representative sample from a given population. They generate samples from a given population, e.g., by drawing numbered papers from a bag

and recording the numbers, and examine the distributions of the samples, comparing these to the distribution of the population. They compare two populations by comparing samples from each population.

<b>Demonstration of Learning:</b>	<b>Pacing for Unit</b>
CFA 1: CGA 2: CFA 3: MoU: EoU:	18 Days
<b>Family Overview (link below)</b>	<b>Integration of Technology:</b>
<a href="#">Probability and Sampling</a>	<i>Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning</i>
<b>Unit-specific Vocabulary:</b>	<b>Aligned Unit Materials, Resources, and Technology (beyond core resources):</b>
Absolute value, adjacent angles, area, area of a circle, base, chance experiment, circle, circumference, complementary, constant of proportionality, coordinate plane, corresponding, cross section, deposit, diameter, equivalent expressions, equivalent ratios, event, expand, factor, interquartile range, long division, mean, measurement error, median, negative number, origin, outcome, percent error, percentage, percentage decrease, percentage increase, pi, population, positive number, prism, probability, proportional relationship, pyramid, radius, random, rational number, reciprocal, repeating decimal, representative, right angle, sample, sample space, scale drawing, scale factor, scaled copy, simulation, solution to an equation, solution to an inequality, squared, straight angle, supplementary, surface area, tape diagram, term, unit rate, variable, vertical angles, volume, withdrawal	Edulastic DESMOS
<b>Connections to Prior Units:</b>	<b>Connections to Future Units:</b>
Grade 6, Unit 8	Grade 8, Unit 6
<b>Differentiation through <a href="#">Universal Design for Learning</a></b>	
<b>UDL Indicator</b>	<b>Teacher Actions:</b>
<b>Representation:</b> Highlight patterns, critical features, big ideas, and relationships	<ul style="list-style-type: none"> <li>● Highlight or emphasize key elements in text, graphics, diagrams, formulas</li> <li>● Use outlines, graphic organizers, unit organizer routines, concept organizer routines, and concept mastery routines to emphasize key ideas and relationships</li> <li>● Use multiple examples and non-examples to emphasize</li> </ul>

		<p>critical features</p> <ul style="list-style-type: none"> <li>• Use cues and prompts to draw attention to critical features</li> <li>• Highlight previously learned skills that can be used to solve unfamiliar problems</li> </ul>
<b>Supporting Multilingual/English Learners</b>		
<b>Related <i>CELP standards:</i></b>		<b>Learning Targets:</b>
An EL can construct grade appropriate oral and written claims and support them with reasoning and evidence.		See Italicized Learning Targets/Success Criteria
<b>Lesson Sequence</b>	<b>Learning Target</b>	<b>Success Criteria/ Assessment</b>
1	<p><i>I can describe observations and predictions during a game (Lesson 1)</i></p> <p><i>I can explain predictions (Lesson 2)</i></p> <p><i>I can explain how to determine which events are more likely (Lesson 3)</i></p> <p><i>I can describe patterns observed in repeated experiments (Lesson 4)</i></p> <p><i>I can justify whether situations are surprising and possible (Lesson 4)</i></p> <p><i>I can explain possible differences in experimental and theoretical probability (Lesson 5)</i></p> <p><i>I can compare sample spaces and probably of outcomes for different spinners (Lesson 5)</i></p> <p><i>I can describe chance experiments to model situations (Lessons 6 and 7)</i></p>	<p>Lesson 1: Mystery Bags</p> <ul style="list-style-type: none"> <li>• I can get an idea for the likelihood of an event by using results from previous experiments.</li> </ul> <p>Lesson 2: Chance Experiments</p> <ul style="list-style-type: none"> <li>• I can describe the likelihood of events using the words impossible, unlikely, equally likely as not, likely, or certain.</li> <li>• I can tell which event is more likely when the chances of different events are expressed as fractions, decimals, or percentages.</li> </ul> <p>Lesson 3: What Are Probabilities?</p> <ul style="list-style-type: none"> <li>• I can use the sample space to calculate the probability of an event when all outcomes are equally likely.</li> <li>• I can write out the sample space for a simple chance experiment.</li> </ul> <p>Lesson 4: Estimating Probabilities Through Repeated Experiments</p> <ul style="list-style-type: none"> <li>• I can estimate the probability of an event based on the results from repeating an experiment.</li> <li>• I can explain whether certain results from repeated experiments would be surprising or not.</li> </ul> <p>Lesson 5: More Estimating Probabilities</p> <ul style="list-style-type: none"> <li>• I can calculate the probability of an event when the outcomes in the sample space are not equally likely.</li> <li>• I can explain why results from repeating an experiment may not exactly match the expected probability for an event.</li> </ul> <p>Lesson 6: Estimating Probabilities Using Simulation</p> <ul style="list-style-type: none"> <li>• I can simulate a real-world situation using a simple experiment that reflects the probability of the actual event.</li> </ul>
2	<p><i>I can describe chance experiments to model situations (Lessons 6 and 7)</i></p> <p><i>I can explain how to use simulations to estimate probability (Lesson 7)</i></p>	<p>Lesson 7: Simulating Multi-step Experiments</p> <ul style="list-style-type: none"> <li>• I can use a simulation to estimate the probability of a multi-step event.</li> </ul> <p>Lesson 8: Keeping Track of All Possible Outcomes</p> <ul style="list-style-type: none"> <li>• I can write out the sample space for a multi-step experiment, using a list, table, or tree diagram.</li> </ul> <p>Lesson 9: Multi-step Experiments</p>

	<p><i>I can compare methods for writing sample spaces (Lesson 8)</i></p> <p><i>I can describe a simulation used to model a situation (Lesson 10)</i></p> <p><i>I can explain how to use a simulation to answer questions about the situation (Lesson 10)</i></p>	<ul style="list-style-type: none"> <li>I can use the sample space to calculate the probability of an event in a multi-step experiment.</li> </ul> <p>Lesson 10: Designing Simulations</p> <ul style="list-style-type: none"> <li>I can design a simulation to estimate the probability of a multi-step real-world situation.</li> </ul>
3	<p>I can describe observations about data sets (Lessons 11 and 17)</p> <p>I can compare heights of two groups (Lesson 11)</p> <p>I can justify which samples are or are not representative of a larger population (Lesson 13)</p> <p>I can compare measures of center with samples (Lesson 13)</p> <p>I can compare sampling methods (Lesson 14)</p>	<p>Lesson 11: Comparing Groups</p> <ul style="list-style-type: none"> <li>I can calculate the difference between two means as a multiple of the mean absolute deviation.</li> <li>When looking at a pair of dot plots, I can determine whether the distributions are very different or have a lot of overlap.</li> </ul> <p>Lesson 12: Larger Populations</p> <ul style="list-style-type: none"> <li>I can explain why it may be useful to gather data on a sample of a population.</li> <li>When I read or hear a statistical question, I can name the population of interest and give an example of a sample for that population.</li> </ul> <p>Lesson 13: What Makes a Good Sample?</p> <ul style="list-style-type: none"> <li>I can determine whether a sample is representative of a population by considering the shape, center, and spread of each of them.</li> <li>I know that some samples may represent the population better than others.</li> <li>I remember that when a distribution is not symmetric, the median is a better estimate of a typical value than the mean.</li> </ul> <p>Lesson 14: Sampling in a Fair Way</p> <ul style="list-style-type: none"> <li>I can describe ways to get a random sample from a population.</li> <li>I know that selecting a sample at random is usually a good way to get a representative sample</li> </ul>
4	<p>I can describe observations about data sets (Lessons 11 and 17)</p> <p>I can justify which samples correspond with each show, which show is most appropriate for a commercial, and whether a movie is eligible for an award (Lesson 15)</p> <p>I can justify reasoning about samples and populations (Lesson 16)</p> <p>I can justify whether or not differences between samples are meaningful (Lesson 18, 19, and</p>	<p>Lesson 15: Estimating Population Measures of Center</p> <ul style="list-style-type: none"> <li>I can consider the variability of a sample to get an idea for how accurate my estimate is.</li> <li>I can estimate the mean or median of a population based on a sample of the population.</li> </ul> <p>Lesson 16: Estimating Population Proportions</p> <ul style="list-style-type: none"> <li>I can estimate the proportion of population data that are in a certain category based on a sample.</li> </ul> <p>Lesson 17: More about Sampling Variability</p> <ul style="list-style-type: none"> <li>I can use the means from many samples to judge how accurate an estimate for the population mean is.</li> <li>I know that as the sample size gets bigger, the sample mean is more likely to be close to the population mean.</li> </ul> <p>Lesson 18: Comparing Populations Using Samples</p> <ul style="list-style-type: none"> <li>I can calculate the difference between two medians as a multiple of the interquartile range.</li> <li>I can determine whether there is a meaningful difference between two populations based on a sample</li> </ul>

	20) I can compare populations based on samples (Lessons 18 and 20)	from each population. Lesson 19: Comparing Populations With Friends <ul style="list-style-type: none"> <li>I can decide what information I need to know to be able to compare two populations based on a sample from each.</li> </ul>
5	<i>I can justify whether or not differences between samples are meaningful (Lesson 18, 19, and 20)</i>  <i>I can compare populations based on samples (Lessons 18 and 20)</i>	Lesson 20: Memory Test <ul style="list-style-type: none"> <li>I can compare two groups by taking a random sample, calculating important measures, and determining whether the populations are meaningfully different.</li> </ul>

## Course Assessment Map

### Edulastic Links to be Added at a later time

Unit	Assessment 1	Assessment 2	Assessment 3	Assessment 4	Assessment 5	Assessment 6
Unit 1-Scale Drawings	CFA 1 (L3)	CFA 2 (L7)	CFA 3 (L11)	EOU (A)		
Unit 2-Introducing Proportional Relationships	CFA 1 (L3)	CFA 2 (L7)	CFA 3 (L11)	EOU (A)		
Unit 3-Measuring Circles	CFA 1 (L3)	CFA 2 (L8/9)	EOU (A)			
Unit 4-Proportional relationships and Percentages	CFA 1 (L4)	CFA 2 (L8)	CFA 3 (L11)	EOU (A)		
Unit 5-Rational Number Arithmetic	CFA 1 (L3)	CFA 2 (L6)	CFA 3 (L12)	CFA 4 (L15)	EOU (B)	
Unit 6-Expressions, Equations, and Inequalities	CFA 1 (L4/5)	CFA 2 (10)	MOU (A)	CFA 3 (L16)	CFA 4 (L21)	EOU (B)
Unit 7-Angles, Triangles and Prisms	CFA 1 (L2)	CFA 2 (L5)	CFA 3 (L9)	CFA 4 (L16)	EOU (A)	
Unit 8-Probability and Sampling						

Course Title:	Content Area:	Grade Level:	Credit (if applicable)
Pre-K Music	Music	Pre-K	NA

**Course Description:**

This classroom experience is a part of a sequential music curriculum, which offers each student the opportunity to engage in the art of music utilizing the Four Artistic Processes as outlined in the National Coalition for Core Arts Standards: Creating, Performing, Responding, and Connecting. This course provides an introduction to the musical concepts of Pitch Exploration, Movement Exploration, Melody, Expression, Rhythm, Literacy, and Technique. Students will explore these concepts through various musical activities including singing, performing on instruments, moving, improvising, listening, and evaluating.

**Aligned Core Resources:**

**First Steps in Music for Preschool and Beyond - John Feierabend**  
**The Book of Call and Response - John Feierabend**  
**The Book of Movement Exploration - John Feierabend**  
**The Book of Echo Songs - John Feierabend**  
**First Steps in Music for Early Elementary - John Feierabend**

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

**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

**SOCIAL AND CROSS-CULTURAL SKILLS**

- Know when it is appropriate to listen and when to speak
- Conduct themselves in a respectable, professional manner
- Respect cultural differences and work effectively with people from a range of social and cultural backgrounds

**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

**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

**EMPATHY**

- Demonstrating understanding of others perspectives and needs
- Listen with an open mind to understand others' situations
- Understand the concept of community as a means for supporting others in need

**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 (including becoming multilingual)
- GOAL DIRECTED**
- Set goals with tangible and intangible success criteria
  - Persist to accomplish difficult tasks and to overcome academic and personal barriers to meet goals
- 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 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](#)

[PreK Music - Equity Audit](#)

**Standard Matrix**

District Learning Expectations and Standards	<a href="#">Pitch Exploration</a>	<a href="#">Fragment Songs</a>	<a href="#">Movement Exploration</a>	<a href="#">Arioso</a>	<a href="#">Song Tales</a>
<b>Creating The Basics</b>					
MU:Cr1.1 Generate and conceptualize artistic ideas and work.		x	x		x
MU:Cr2.1 Organize and develop artistic ideas and work.				x	
MU:Cr3.1 Refine and complete artistic work.	x	x	x	x	
<b>Performing</b>					
MU:Pr4.1 Select, analyze and interpret artistic work for presentation.		x	x	x	x
MU:Pr5.1 Develop and refine artistic techniques and work for presentation.		x	x	x	
MU:Pr6.1 Convey meaning through the presentation of artistic work.	x	x			x
<b>Responding</b>					
MU:Re7.1 Perceive and analyze artistic work.					
MU:Re8.1 Interpret intent and meaning in artistic work.	x	x	x		

MU:Re9.1 Apply criteria to evaluate artistic work.					x
<b>Connecting</b>					
MU:Cn10.0 Synthesize and relate knowledge and personal experiences to make art.				x	
MU:Cn11.1 Relate artistic ideas and works with societal, cultural and historical context to deepen understanding.			x		x

### Unit Links

<b>Pitch Exploration</b>	<b>3</b>
<b>Fragment Songs</b>	<b>6</b>
<b>Movement Exploration</b>	<b>9</b>
<b>Arioso</b>	<b>11</b>
<b>Song Tales</b>	<b>14</b>

### Unit Title:

## Pitch Exploration

### Relevant Standards: **Bold indicates priority**

**MA:Cr3.1.PK** - With substantial guidance, consider personal, peer, and teacher feedback when demonstrating and refining personal musical ideas.

**MU:Pr6.1.PK** - With substantial guidance, perform music with expression.

**MU:Re8.1.PK** - With substantial guidance, explore music's expressive qualities (such as dynamics and tempo).

### Essential Question(s):

**Cr3.1:** How do musicians improve the quality of their creative work?  
**Pr6.1:** When is a performance judged ready to present?  
 -How do context and the manner in which musical work is presented influence audience response?  
**Re8.1:** How do we discern the musical creators' and performers' expressive intent?

### Enduring Understanding(s):

**Cr3:** Musicians evaluate, and refine their work through openness to new ideas, persistence, and the application of appropriate criteria.  
**Pr6:** Musicians judge performance based on criteria that vary across time, place, and cultures. The context and how a work is presented influence the audience response.  
**Re8:** Through their use of elements and structures of music, creators and performers provide clues to their expressive intent.

### Demonstration of Learning:

### Pacing for Unit

<p>Correct use of head voice  Follow a pattern (presented in various forms) with voice correctly  Identify patterns that go up  Identify patterns that go down</p>	<p>Year-Long</p>
<p><b>Family Overview (link below)</b></p>	<p><b>Integration of Technology:</b></p>
<p>Utilizing a repertoire of games, audio recordings, and exercises, students will be expected to create with, perform with, and respond to melodic contours and patterns.</p>	<p>Smartboard integration</p> <ul style="list-style-type: none"> <li>• Youtube videos</li> <li>• Feierabend Move It Videos</li> <li>• Google Docs/Slides</li> </ul> <p>CD Player/Speakers</p>
<p><b>Unit-specific Vocabulary:</b></p>	<p><b>Aligned Unit Materials, Resources, and Technology (beyond core resources):</b></p>
<p>Up  Down  Singing Voice  Talking Voice  Pathway</p>	<p><b>Tech</b>  Keeping the Beat CD - John Feierabend  Old Joe Clark CD - John Feierabend  There's a Hole in the Bucket CD - John Feierabend  Had a Little Rooster CD - John Feierabend  Finding Nemo Whale Scene - Disney  Whale Noises  Smartboard  Speakers</p> <p><b>Books</b>  Roller Coaster -</p> <p><b>Flashcards</b>  Pitch Pathways - John Feierabend</p> <p><b>Other</b>  Puppets  Pipe Cleaners  Flashlight  Pictures of Animals  Slide Whistle</p>
<p><b>Opportunities for Interdisciplinary Connections:</b></p>	<p><b>Anticipated misconceptions:</b></p>
<p>Cognition  Social and Emotional Development  Mathematics</p>	<ul style="list-style-type: none"> <li>• Using chest voice instead of head voice</li> <li>• Using a talking voice instead of a singing voice</li> <li>• Lack of connection between the pathway they see and what the students vocalize</li> <li>• Not singing anything when it's their turn</li> </ul>
<p><b>Connections to Prior Units:</b></p>	<p><b>Connections to Future Units:</b></p>
<p>NA</p>	<p>Fragment Songs - Use of head voice vs. chest or talking voice, ability to repeat after someone else, ability to respond to different melodies  Movement Exploration - Ability to copy stimuli (Flashlight, puppet, voice, movement, etc.)  Arioso - Use of head voice vs. chest or talking voice, ability to respond to a melody, ability to sing their own idea, singing when it's their turn  Songtales - Ability to sit and listen to something, ability to respond appropriately</p>
<p><b>Differentiation through <a href="#">Universal Design for Learning</a></b></p>	

UDL Indicator		Teacher Actions:	
<b>Physical Action</b> 4.1 Vary the methods for response and navigation		<ul style="list-style-type: none"> <li>Provide alternatives in the requirements for rate, timing, speed, and range of motor action required to interact with instructional materials, physical manipulatives, and technologies</li> </ul>	
Supporting Multilingual/English Learners			
Related CELP standards:		Learning Targets:	
K.8 An EL can determine the meaning of words and phrases in oral presentations and literary and informational text.		I can manipulate my voice to match the pictures and examples given to me.	
Lesson Sequence	Learning Target	Success Criteria/ Assessment	Resources
1	I can use my voice to copy the teacher's movements.	Students follow the contour of the teacher's arms using head voice.	Feierabend - The Book of Pitch Exploration (Pg. 11)
2	I can follow a flashlight path with my voice.	Students follow the contour of the flashlight path using head voice.	Feierabend - The Book of Pitch Exploration (Pg. 12)
3, 8	I can match animals to their sounds.	Students identify which animal makes which sound.	Feierabend - The Book of Pitch Exploration (Pg 14)
3, 8	I can find people making the same sound as me.	Students group with others making the same animal noise as themselves.	Feierabend - The Book of Pitch Exploration (Pg 14)
4, 9	I can follow a puppet's path with my voice.	Students follow the contour of the puppet's path using head voice.	Feierabend - The Book of Pitch Exploration (Pg 17)
4, 9	I can echo a puppet's voice.	Students follow the contour of the teacher's voice using head voice.	Feierabend - The Book of Pitch Exploration (Pg 17)
5	I can trace a line with my voice.	Students make a melodic line with a pipe cleaner. Students follow the contour of the pipe cleaner using head voice.	Feierabend - The Book of Pitch Exploration (Pg. 19)
6	I can use my voice to sound like a whale.	Students use head voice to imitate the sound of a whale.	Feierabend - The Book of Pitch Exploration (Pg. 23) Youtube clip of whale sounds
7	I can echo a slide whistle with my voice.	Students use head voice to echo a pathway made by a slide whistle.	Feierabend - The Book of Pitch Exploration (Pg. 9)

10	I can follow a pathway using my voice.	Students use head voice to follow the contour of a pathway.	Feierabend Pitch Pathway Flashcards
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<b>Unit Title:</b>	
Fragment Songs	
<b>Relevant Standards: Bold indicates priority</b>	
<p><b>MU:Cr1.1.PK</b> - With substantial guidance, explore and experience a variety of music.</p> <p><b>MA:Cr3.1.PK</b> - With substantial guidance, consider personal, peer, and teacher feedback when demonstrating and refining personal musical ideas.</p> <p><b>MU:Pr4.2.PK</b> - With substantial guidance, explore and demonstrate awareness of musical contrasts.</p> <p><b>MU:Pr5.1.PK</b> - With substantial guidance, apply personal, peer, and teacher feedback to refine performances.</p> <p><b>MU:Pr6.1.PK</b> - With substantial guidance, perform music with expression.</p> <p><b>MU:Re8.1.PK</b> - With substantial guidance, explore music's expressive qualities (such as dynamics and tempo).</p>	
<b>Essential Question(s):</b>	<b>Enduring Understanding(s):</b>
<p><b>Cr 1:</b> How do musicians generate creative ideas?</p> <p><b>Cr3:</b> How do musicians improve the quality of their creative work?</p> <p><b>Pr4:</b> How does understanding the structure and context of musical works inform performance?</p> <p><b>Pr5:</b> How do musicians improve the quality of their performance?</p> <p><b>Pr6:</b> When is a performance judged ready to present? - How do context and the manner in which musical work is presented influence audience response?</p> <p><b>Re8:</b> How do we discern the musical creators' and performers' expressive intent?</p>	<p><b>Cr 1:</b> The creative ideas, concepts, and feelings that influence musicians' work emerge from a variety of sources.</p> <p><b>Cr3:</b> Musicians evaluate, and refine their work through openness to new ideas, persistence, and the application of appropriate criteria.</p> <p><b>Pr4:</b> Analyzing creators' context and how they manipulate elements of music provides insight into their intent and informs performance.</p> <p><b>Pr5:</b> To express their musical ideas, musicians analyze, evaluate, and refine their performance over time through openness to new ideas, persistence, and the application of appropriate criteria.</p> <p><b>Pr6:</b> Musicians judge performance based on criteria that vary across time, place, and cultures. The context and how a work is presented influence the audience response.</p> <p><b>Re8:</b> Through their use of elements and structures of music, creators and performers provide clues to their expressive intent.</p>
<b>Demonstration of Learning:</b>	<b>Pacing for Unit</b>
<ul style="list-style-type: none"> <li>• Correct use of head voice</li> <li>• Ability to repeat after teacher (Echo Songs)</li> <li>• Ability to respond to teacher (Call and Response)</li> <li>• Students can sing in a group</li> </ul>	Year-Long
<b>Family Overview (link below)</b>	<b>Integration of Technology:</b>
Utilizing a repertoire of simple songs, games, audio recordings, and tunes, students will be expected to create with, perform with, and respond to melodic	CD Player/Speakers <ul style="list-style-type: none"> <li>• Feierabend CDs</li> </ul> Smartboard

contours and patterns.	<ul style="list-style-type: none"> <li>• Youtube Videos</li> <li>• Google Docs/Slides</li> </ul> Electric Piano
<b>Unit-specific Vocabulary:</b>	<b>Aligned Unit Materials, Resources, and Technology (beyond core resources):</b>
Repeat Singing Voice Respond Echo	<b>Tech</b> Old Joe Clark CD - John Feierabend There's a Hole in the Bucket CD - John Feierabend Had a Little Rooster CD - John Feierabend Smartboard Speakers <b>Books</b> My Aunt Came Back - John Feierabend <b>Flashcards</b> Oh, In the Woods - John Feierabend Down By the Bay - John Feierabend <b>Other</b> Piano Ukulele
<b>Opportunities for Interdisciplinary Connections:</b>	<b>Anticipated misconceptions:</b>
Cognition Social and Emotional Development Language and Literacy	<ul style="list-style-type: none"> <li>• Singing when it's not their turn</li> <li>• Using a talking voice instead of singing voice</li> <li>• Repeating what the teacher says when they should sing something else (Call and Response)</li> <li>• Not singing anything when it's their turn</li> </ul>
<b>Connections to Prior Units:</b>	<b>Connections to Future Units:</b>
Pitch Exploration - Use of head voice vs. chest or talking voice, ability to repeat after someone else, ability to respond to different melodies	Movement Exploration - Ability to copy the teacher, ability to respond to a stimuli appropriately Arioso - Use of head voice vs. chest or talking voice, ability to respond to a melody, singing when it's their turn, singing their own idea Songtales - Ability to sit and listen to something, ability to respond appropriately
<b>Differentiation through <a href="#">Universal Design for Learning</a></b>	
<b>UDL Indicator</b>	<b>Teacher Actions:</b>
<b>Perception</b> 1.2 Offer alternatives for auditory information  <b>Physical Action</b> 4.1 Vary the methods for response and navigation  <b>Self Regulation</b> 9.2 Facilitate personal coping skills and strategies	<ul style="list-style-type: none"> <li>• Provide visual diagrams, charts, notations of music or sound</li> <li>• Provide visual or tactile (e.g., vibrations) equivalents for sound effects or alerts</li> <li>• Provide alternatives in the requirements for rate, timing, speed, and range of motor action required to interact with instructional materials, physical manipulatives, and technologies</li> <li>• Develop internal controls and coping skills</li> </ul>

Supporting Multilingual/English Learners			
Related CELP standards:		Learning Targets:	
K.9 An EL can create clear and coherent grade appropriate speech and text.		<ul style="list-style-type: none"> <li>I can use my singing voice appropriately.</li> </ul>	
Lesson Sequence	Learning Target	Success Criteria/ Assessment	Resources
1, 2, 4	I can sing when it's my turn.	Students listen to the teacher singing, then respond appropriately with the lyrics provided to them.	Feierabend - The Book of Call and Response
3, 5, 6, 7, 8, 9, 10	I can echo after the teacher.	Students listen to the teacher singing, then echo the lyrics sung by the teacher.	Feierabend - The Book of Echo Songs

Unit Title:	
<h2>Movement Exploration</h2>	
Relevant Standards: Bold indicates priority	
<p><b>MU:Cr1.1.PK</b> - With substantial guidance, explore and experience a variety of music.</p> <p><b>MA:Cr3.1.PK</b> - With substantial guidance, consider personal, peer, and teacher feedback when demonstrating and refining personal musical ideas.</p> <p><b>MU:Pr4.2.PK</b> - With substantial guidance, explore and demonstrate awareness of musical contrasts.</p> <p><b>MU:Pr5.1.PK</b> - With substantial guidance, apply personal, peer, and teacher feedback to refine performances.</p> <p><b>MU:Re8.1.PK</b> - With substantial guidance, explore music's expressive qualities (such as dynamics and tempo).</p> <p><b>MU:Cn11.1.PK</b> - Demonstrate understanding of relationships between music and the other arts, other disciplines, varied contexts, and daily life.</p>	
Essential Question(s):	Enduring Understanding(s):
<p><b>CR1:</b> How do musicians generate creative ideas?</p> <p><b>CR3:</b> How do musicians improve the quality of their creative work?</p> <p><b>PR4:</b> How does understanding the structure and context of musical works inform performance?</p> <p><b>PR5:</b> How do musicians improve the quality of their performance?</p> <p><b>PR8:</b> How do we discern the musical creators' and performers' expressive intent?</p> <p><b>CN11:</b> How do the other arts, other disciplines, contexts, and daily life inform creating, performing, and responding to music?</p>	<p><b>CR1:</b> The creative ideas, concepts, and feelings that influence musicians' work emerge from a variety of sources.</p> <p><b>CR3:</b> Musicians evaluate, and refine their work through openness to new ideas, persistence, and the application of appropriate criteria.</p> <p><b>PR4:</b> Analyzing creators' context and how they manipulate elements of music provides insight into their intent and informs performance.</p> <p><b>PR5:</b> To express their musical ideas, musicians analyze, evaluate, and refine their performance over time through openness to new ideas, persistence, and the application of appropriate criteria.</p> <p><b>PR8:</b> Through their use of elements and structures of music, creators and performers provide clues to their</p>

	expressive intent. <b>CN11:</b> Understanding connections to varied contexts and daily life enhances musicians' creating, performing, and responding.
<b>Demonstration of Learning:</b>	<b>Pacing for Unit</b>
<ul style="list-style-type: none"> <li>Using appropriate body movements</li> <li>Able to copy movement with their body</li> <li>Moves their body appropriately to the music (speed, size of movements, etc.)</li> </ul>	Year-Long
<b>Family Overview (link below)</b>	<b>Integration of Technology:</b>
Utilizing a repertoire of games, video recordings, and move it videos, students will be expected to move to, perform with, and respond to music and solo/unison timbres.	Smartboard <ul style="list-style-type: none"> <li>Move It DVDs</li> <li>GoNoodle Videos</li> <li>Movement Videos, other</li> </ul> CD Player/Speakers Electric Piano
<b>Unit-specific Vocabulary:</b>	<b>Aligned Unit Materials, Resources, and Technology (beyond core resources):</b>
Move Freeze Safe Body Fast Slow Loud Quiet Beat Steady Beat	<b>Tech</b> Move It! Volumes 1 + 2 - John Feierabend Keeping the Beat CD - John Feierabend Old Joe Clark CD - John Feierabend There's a Hole in the Bucket CD - John Feierabend Had a Little Rooster CD - John Feierabend Smartboard Speakers <b>Other</b> Piano Ukulele
<b>Opportunities for Interdisciplinary Connections:</b>	<b>Anticipated misconceptions:</b>
Social and Emotional Development Physical Health and Development	<ul style="list-style-type: none"> <li>Students move any way they like</li> <li>Students don't move</li> <li>Students don't know how to make their own movement</li> <li>Students make movements that aren't appropriate to the music being played</li> </ul>
<b>Connections to Prior Units:</b>	<b>Connections to Future Units:</b>
Pitch Exploration - Ability to copy stimuli (Flashlight, puppet, voice, movement, etc.) Fragment Songs - Ability to copy the teacher, ability to respond to a stimuli appropriately	Arioso - Ability to respond to a melody, moving when it's their turn, responding appropriately to a stimuli Songtales - Ability to sit and listen/watch something, ability to respond appropriately
<b>Differentiation through <a href="#">Universal Design for Learning</a></b>	
<b>UDL Indicator</b>	<b>Teacher Actions:</b>
<b>Physical Action</b> 4.1 Vary the methods for response and navigation	<ul style="list-style-type: none"> <li>Provide alternatives in the requirements for rate, timing, speed, and range of motor action</li> </ul>

<p><b>Self Regulation</b> 9.3 Develop self-assessment and reflection</p>	<p>required to interact with instructional materials, physical manipulatives, and technologies</p> <ul style="list-style-type: none"> <li>Use activities that include a means by which learners get feedback and have access to alternative scaffolds (e.g., charts, templates, feedback displays) that support understanding progress in a manner that is understandable and timely.</li> </ul>
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**Supporting Multilingual/English Learners**

**Related CELP standards:** **Learning Targets:**

<p>K2 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>	<ul style="list-style-type: none"> <li>I can appropriately participate in movement activities</li> </ul>
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Lesson Sequence	Learning Target	Success Criteria/ Assessment	Resources
1, 8, 9	I can move my body safely to the music.	Students move their bodies appropriately to music.	Feierabend - The Book of Movement Exploration Feierabend Move It DVDs
2	I can name a body part to move to music.	Students pick one body part and move only that body part to music.	Feierabend - The Book of Movement Exploration Feierabend Move It DVDs
3	I can move my body to the speed of the music.	Students keep a steady beat with their body as they move to the music.	Feierabend - The Book of Movement Exploration Feierabend Move It DVDs
4, 10	I can move my body safely while keeping one part still.	Students pick one body part and move their whole body except for that body part.	Feierabend - The Book of Movement Exploration Feierabend Move It DVDs
5	I can move my body safely in different directions.	Students listen to the direction they're to move and appropriately move in that direction (up, down, left, right, etc.)	Feierabend - The Book of Movement Exploration Feierabend Move It DVDs
6	I can move my body safely at different speeds.	Students move their bodies at different speeds as they listen to different pieces of music.	Feierabend - The Book of Movement Exploration Feierabend Move It DVDs
7	I can move my body safely inside my personal bubble.	Students stay inside their own space while moving appropriately to the music.	Feierabend - The Book of Movement Exploration Feierabend Move It DVDs

<b>Unit Title:</b>	
Arioso	
<b>Relevant Standards: Bold indicates priority</b>	
<p><b>MU:Cr2.1.PK</b> - With substantial guidance, explore favorite musical ideas (such as movements, vocalizations, or instrumental accompaniments).</p> <p><b>MA:Cr3.1.PK</b> - With substantial guidance, consider personal, peer, and teacher feedback when demonstrating and refining personal musical ideas.</p> <p><b>MU:Cr3.2.PK</b> - With substantial guidance, share revised personal musical ideas with peers.</p> <p><b>MU:Pr4.3.PK</b> - With substantial guidance, explore music's expressive qualities (such as voice quality, dynamics, and tempo).</p> <p><b>MU:Pr5.1.PK</b> - With substantial guidance, apply personal, peer, and teacher feedback to refine performances.</p> <p><b>MU:Cn10.1.PK</b> - Demonstrate how interests, knowledge, and skills relate to personal choices and intent when creating, performing, and responding to music.</p>	
<b>Essential Question(s):</b>	<b>Enduring Understanding(s):</b>
<p><b>CR2.1:</b> How do musicians make creative decisions?</p> <p><b>CR3.1:</b> How do musicians improve the quality of their creative work?</p> <p>Create 3.2: When is creative work ready to share?</p> <p>Performing 4.3: How do performers interpret musical works?</p> <p>Performing 5: How do musicians improve the quality of their performance?</p> <p>Connecting 10: How do musicians make meaningful connections to creating, performing, and responding?</p>	<p>Create 2.1: Musicians' creative choices are influenced by their expertise, context, and expressive intent.</p> <p>Create 3.1: Musicians evaluate, and refine their work through openness to new ideas, persistence, and the application of appropriate criteria.</p> <p>Create 3.2 Musicians' presentation of creative work is the culmination of a process of creation and communication</p> <p>Performing 4.3: Performers make interpretive decisions based on their understanding of context and expressive intent.</p> <p>Performing 5: To express their musical ideas, musicians analyze, evaluate, and refine their performance over time through openness to new ideas, persistence, and the application of appropriate criteria.</p> <p>Connecting 10: Musicians connect their personal interests, experiences, ideas, and knowledge to creating, performing, and responding.</p>
<b>Demonstration of Learning:</b>	<b>Pacing for Unit</b>
<ul style="list-style-type: none"> <li>• Students can respond to a question using a singing voice</li> <li>• Students can sing by themselves and in a group</li> </ul>	Year-long
<b>Family Overview (link below)</b>	<b>Integration of Technology:</b>
Utilizing a repertoire of simple songs, games, audio recordings, and tunes, students will be expected to create with, perform with, and respond to the four voice types and solo/unison timbres.	<p>Electric Piano</p> <p>Smartboard</p> <ul style="list-style-type: none"> <li>• Google Docs/Slides</li> <li>• Youtube Videos</li> </ul>
<b>Unit-specific Vocabulary:</b>	<b>Aligned Unit Materials, Resources, and Technology</b>

		<b>(beyond core resources):</b>	
Singing Voice Talking Voice		<b>Flashcards</b> Pitch Pathways - John Feierabend <b>Other</b> Puppets Pipe Cleaners Flashlight Slide Whistle	
<b>Opportunities for Interdisciplinary Connections:</b>		<b>Anticipated misconceptions:</b>	
Cognition Social and Emotional Development Language and Literacy Social Studies		<ul style="list-style-type: none"> <li>• Students use a talking or chest voice instead of a singing/head voice</li> <li>• Students don't respond</li> <li>• Students use a silly voice when unexpected</li> </ul>	
<b>Connections to Prior Units:</b>		<b>Connections to Future Units:</b>	
Pitch Exploration - Use of head voice vs. chest or talking voice, ability to respond to a melody, ability to sing their own idea, singing when it's their turn Fragment Songs - Use of head voice vs. chest or talking voice, ability to respond to a melody, singing when it's their turn, singing their own idea Movement Exploration - Ability to respond to a melody, moving when it's their turn, responding appropriately to a stimuli		Songtales - Ability to sit and listen to something, ability to respond appropriately	
<b>Differentiation through <a href="#">Universal Design for Learning</a></b>			
<b>UDL Indicator</b>		<b>Teacher Actions:</b>	
<b>Physical Action</b> 4.1 Vary the methods for response and navigation		<ul style="list-style-type: none"> <li>• Provide alternatives in the requirements for rate, timing, speed, and range of motor action required to interact with instructional materials, physical manipulatives, and technologies</li> </ul>	
<b>Supporting Multilingual/English Learners</b>			
<b>Related <a href="#">CELP standards:</a></b>		<b>Learning Targets:</b>	
K.8 An EL can determine the meaning of words and phrases in oral presentations and literary and informational text.		<ul style="list-style-type: none"> <li>• I can appropriately use my singing voice to create simple phrases.</li> </ul>	
<b>Lesson Sequence</b>	<b>Learning Target</b>	<b>Success Criteria/ Assessment</b>	<b>Resources</b>
1	I can identify the difference between talking and singing.	Students identify a talking voice, a singing voice, and different situations you would use each for.	Youtube - Whisper, Talk, Shout and Sing
2	I can sing my favorite color.	Students use head voice to sing an answer to a question.	Electric Piano Ukulele

3	I can sing my favorite candy/treat.	Students use head voice to sing an answer to a question.	Electric Piano Ukulele
4	I can sing my favorite holiday.	Students use head voice to sing an answer to a question.	Electric Piano Ukulele
5	I can sing my favorite ice cream.	Students use head voice to sing an answer to a question.	Electric Piano Ukulele
6	I can sing my favorite animal.	Students use head voice to sing an answer to a question.	Electric Piano Ukulele
7	I can sing my favorite fruit.	Students use head voice to sing an answer to a question.	Electric Piano Ukulele
8	I can sing my favorite dessert.	Students use head voice to sing an answer to a question.	Electric Piano Ukulele
9,10	I can sing and use an egg shaker the way I'm supposed to.	Students use head voice to sing an answer to a question. Students use appropriate technique while playing an egg shaker.	Electric Piano Ukulele Egg Shakers

**Unit Title:**

**Song Tales**

**Relevant Standards: Bold indicates priority**

**MU:Cr1.1.PK** - With substantial guidance, explore and experience a variety of music.  
**MU:Pr4.1.PK** - With substantial guidance, demonstrate and state preference for varied musical selections.  
**MU:Pr4.3.PK** - With substantial guidance, explore music's expressive qualities (such as voice quality, dynamics, and tempo).  
**MU:Pr6.1.PK** - With substantial guidance, perform music with expression.  
**MU:Re9.1.PK** - With substantial guidance, talk about personal and expressive preferences in music.  
**MU:Cn11.1.PK** - Demonstrate understanding of relationships between music and the other arts, other disciplines, varied contexts, and daily life.

**Essential Question(s):**

**Enduring Understanding(s):**

**CR1:** How do musicians generate creative ideas?  
**PR4.1:** How do performers select repertoire?  
**PR4.3:** How do performers interpret musical works?  
**PR6:** When is a performance judged ready to present?

**CR1:** The creative ideas, concepts, and feelings that influence musicians' work emerge from a variety of sources.  
**PR4.1:** Performers' interest in and knowledge of

<p>How do context and the manner in which musical work is presented influence audience response?  <b>RE9:</b> How do we judge the quality of musical work(s) and performance(s)?  <b>CN11:</b> How do the other arts, other disciplines, contexts, and daily life inform creating, performing, and responding to music?</p>	<p>musical works, understanding of their own technical skill, and the context for a performance influence the selection of repertoire.  <b>PR4.3:</b> Performers make interpretive decisions based on their understanding of context and expressive intent.  <b>PR6:</b> Musicians judge performance based on criteria that vary across time, place, and cultures. The context and how a work is presented influence the audience response.  <b>RE9:</b> The personal evaluation of musical work(s) and performance(s) is informed by analysis, interpretation, and established criteria.  <b>CN11:</b> Understanding connections to varied contexts and daily life enhances musicians' creating, performing, and responding.</p>
<p><b>Demonstration of Learning:</b></p>	<p><b>Pacing for Unit</b></p>
<ul style="list-style-type: none"> <li>• Students sit quietly listening</li> <li>• Students respond to the story</li> <li>• Students connect to the story using experience from their own lives</li> </ul>	<p>Year-Long</p>
<p><b>Family Overview (link below)</b></p>	<p><b>Integration of Technology:</b></p>
<p>Utilizing a repertoire of simple songs, video recordings, songtales and tunes, students will be expected to respond to and connect with a story.</p>	<p>Smartboard</p> <ul style="list-style-type: none"> <li>• Songtale Videos</li> </ul> <p>Electric Piano</p>
<p><b>Unit-specific Vocabulary:</b></p>	<p><b>Aligned Unit Materials, Resources, and Technology (beyond core resources):</b></p>
<p>Songtale  Repeat-After-Me Song  Add-on song (Cumulative Song)</p>	<p><b>Books</b>  The Derby Ram - John Feierabend  There Was a Man and He Was Mad - John Feierabend  The Tailor and the Mouse - John Feierabend  Old Joe Clark - John Feierabend  Momma, Buy Me a China Doll - John Feierabend  Jennie Jenkins - John Feierabend  The Crabfish - John Feierabend  The Frog and the Mouse - John Feierabend  Over in the Meadow - John Feierabend  My Aunt Came Back - John Feierabend  Kitty Alone - John Feierabend  Had a Little Rooster - John Feierabend  Risseldy, Rosseldy - John Feierabend</p> <p><b>Tech</b>  Smartboard  Speakers</p> <p><b>Other</b>  Piano  Ukulele</p>
<p><b>Opportunities for Interdisciplinary Connections:</b></p>	<p><b>Anticipated misconceptions:</b></p>
<p>Cognition  Language and Literacy</p>	<p>Students interrupt the story</p>

Mathematics Science			
<b>Connections to Prior Units:</b>		<b>Connections to Future Units:</b>	
Pitch Exploration - Ability to sit and listen to something, ability to respond appropriately Fragment Songs - Ability to sit and listen to something, ability to respond appropriately Movement Exploration - Ability to sit and listen/move to something, ability to respond appropriately Arioso - Ability to sit and listen to something, ability to respond appropriately		NA	
<b>Differentiation through <a href="#">Universal Design for Learning</a></b>			
<b>UDL Indicator</b>		<b>Teacher Actions:</b>	
<b>Perception</b> 1.2 Offer alternatives for auditory information  <b>Language and Symbols</b> 2.4 Promote understanding across languages		<ul style="list-style-type: none"> <li>• Provide visual or tactile (e.g., vibrations) equivalents for sound effects or alerts</li> <li>• Provide visual and/or emotional description for musical interpretation</li> <li>• Embed visual, non-linguistic supports for vocabulary clarification (pictures, videos, etc)</li> </ul>	
<b>Supporting Multilingual/English Learners</b>			
<b>Related <a href="#">CELP standards:</a></b>		<b>Learning Targets:</b>	
K.1 An EL can construct meaning from oral presentations and literary and informational text through grade appropriate listening, reading, and viewing.		I can identify some key words, attributes, and phrases.	
<b>Lesson Sequence</b>	<b>Learning Target</b>	<b>Success Criteria/ Assessment</b>	<b>Resources</b>
1-10	I can use whole body listening.	Students can sit and listen to a story being sung to them.	Feierabend Songtales
1, 2, 5, 8	I can actively participate with the story.	Students can help count, identify colors, make animal noises, or echo the story to connect what they know to the story.	Feierabend Songtales

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

**Course Description:**

Students learn by doing hands-on activities that relate to stories they are read. These activities allow them to experience math, science, language arts, social studies, art and more. The Bristol library Pre-K curricula embeds this *learn-by-doing* philosophy by focusing on high expectations for all students and providing students with opportunities to learn, grow, and understand through the use of a variety of strategies, tools, and technologies. The library curriculum is responsive to the individual needs of students, while providing a structure tied to the Connecticut Early Learning and Development Standards (CT ELDS).

The *learn-by-doing* philosophy develops Pre-K students who can effectively and efficiently apply lessons learned in the library to their lives to understand the complex world around them. The library curricula allows students to experience listening to a variety of books in different formats. These books relate to their monthly mathematics themes to help to provide interdisciplinary connections. Making connections between library and other disciplines is key to the continued learning process.

**Aligned Core Resources:**

N/A

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

**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

**INFORMATION LITERACY**

- Evaluate information critically and competently

**CRITICAL THINKING AND PROBLEM SOLVING**

- Transfer knowledge to other situations

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

N/A

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

[PreK Library Equity Curriculum Review](#)

**Standard Matrix**

District Learning Expectations and Standards	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
<b>Cognition:</b> Strand B: Early learning experiences will support children to use logic and reasoning.									
Attributes, Sorting and Patterns									
C.48.8 Recognize patterns in routines, objects and/or sounds	2	N/A	1	N/A	N/A	N/A	N/A	N/A	N/A

and replicate sequence using objects or language									
C.48.7 Identify similarities and differences in objects, people, events, sounds based on one attribute (e.g., same or different colors, loud or soft sound.)	N/A	N/A	N/A	N/A	N/A	1	1	N/A	N/A
Symbolic Representation									
C.48.10 Use or make a prop to represent an object (e.g., build a telephone)	N/A	N/A	N/A	1	N/A	N/A	N/A	N/A	N/A
C.48.11 Act out actions or scenarios involving familiar roles (e.g., teacher, doctor, firefighter)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1
<b>Language and Literacy:</b> Strand D: Early learning experiences will support children to gain book appreciation and knowledge									
Understanding of Stories or Information									
L.48.13 Demonstrate comprehension through retelling with use of pictures and props, acting out main events or sharing information learned from nonfiction text	N/A	1	N/A	N/A	1	N/A	N/A	N/A	N/A
L.48.15 Make predictions and/or ask questions about the text by examining the title, cover, pictures	N/A	N/A	N/A	N/A	1	N/A	N/A	1	1
<b>Language and Literacy:</b> Strand F: Early learning experiences will support children to develop phonological awareness									
Phonological Awareness									
L.48.20 Recognize rhyming words in songs, chants or poems	N/A	N/A	N/A	1	N/A	N/A	N/A	N/A	N/A
L.48.21 Identify when initial sounds in words are the same	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1

<b>Mathematics:</b> Strand C: Early learning experiences will support children to understand the attributes and relative properties of objects									
Data									
M.48.9 Sort objects into two groups, count, and compare the quantity of the groups formed (e.g., indicate which is more)	1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sorting and Classifying									
M.48.10 Sort and classify objects by one attribute into two or more groups (e.g., color, size, shape)	1	1	N/A	N/A	N/A	1	N/A	N/A	N/A
<b>Mathematics</b> Stand D: Early Learning Experiences will support children to understand shapes and spatial relationships (geometry and spatial sense)									
Identification of Shapes									
M.48.12 Identify 2-dimensional shapes (starting with familiar shapes such as circle and triangle) in different orientations and sizes	N/A	N/A	2	N/A	N/A.	N/A	N/A	N/A	N/A
<b>Science:</b> Strand C: Early learning experiences will support children to understand patterns, process and relationships of living things									
Unity and Diversity of Life									
S.48.5 Compare and contrast basic features of living things	N/A	N/A	N/A	1	N/A	N/A	N/A	N/A	N/A
S.48.6 Recognize changes in living things over their lifespan by observing similarities and differences between babies and adults	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2	N/A
Living Things and Their Interactions with the Environment and Each Other									
S.48.7 Explore how animals depend upon the environment for food, water and shelter	N/A	N/A	N/A	N/A	N/A.	N/A	N/A	2	N/A
<b>Science:</b> Strand D: Early learning experiences will support children to understand physical sciences.									

Energy, Force and Motion

S.48.8 Investigate how objects' speed and direction can be varied

N/A

N/A

N/A

N/A

N/A

N/A

2

N/A

N/A

Matter and its Properties

S.48.9 Compare and contrast attributes of common materials related to their function (e.g., flexibility, transparency, strength)

N/A

N/A

N/A

N/A

N/A

N/A

2

N/A

N/A

### 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*

[September](#)

[October](#)

[November](#)

[December](#)

[January](#)

[February](#)

[March](#)

[April](#)

[May](#)

<b>Unit Title:</b>													
September (focus: apples)													
<b>Relevant Standards: Bold indicates priority</b>													
C.48.8 Recognize patterns in routines, objects and/or sounds and replicate sequence using objects or language M.48.9 Sort objects into two groups, count, and compare the quantity of the groups formed (e.g., indicate which is more) M.48.10 Sort and classify objects by one attribute into two or more groups (e.g., color, size, shape)													
<b>Essential Question(s):</b>	<b>Enduring Understanding(s):</b>												
<ul style="list-style-type: none"> <li>What skills and knowledge are needed to develop effective approaches to learning?</li> <li>What skills and knowledge are needed to understand the attributes and relative properties of objects?</li> </ul>	<ul style="list-style-type: none"> <li>Sort and classify objects by one attribute (color)</li> <li>Create and recognize a pattern</li> </ul>												
<b>Demonstration of Learning:</b>	<b>Pacing for Unit</b>												
Card sorting Pattern creation	2 lessons over one month												
<b>Family Overview (link below)</b>	<b>Integration of Technology:</b>												
<a href="#">September Family Overview</a>	<i>Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning</i>												
<b>Unit-specific Vocabulary:</b>	<b>Aligned Unit Materials, Resources, and Technology (beyond core resources):</b>												
<table border="1"> <tr> <td>apple</td> <td>seed</td> <td>pick</td> <td>pattern</td> </tr> <tr> <td>red</td> <td>yellow</td> <td>green</td> <td>sort</td> </tr> <tr> <td>tree</td> <td>tree</td> <td>branch</td> <td>stem</td> </tr> </table>	apple	seed	pick	pattern	red	yellow	green	sort	tree	tree	branch	stem	<u>Max and Mo go Apple Picking</u> by Patricia Lakin <u>Daniel's Apple Picking Adventure</u> by Maggie Testa <u>Pinkalicious: Apples, Apples, Apples</u> by Victoria Kann <u>Curious George and the Apple Harvest</u> by H.A. Rey The Magical Yet by Angela DiTerlizzi
apple	seed	pick	pattern										
red	yellow	green	sort										
tree	tree	branch	stem										
<b>Opportunities for Interdisciplinary Connections:</b>	<b>Anticipated misconceptions:</b>												
Math connections with comparing and recognizing patterns Art connection with color	When different colored objects are provided, instinct may want students to put them together by color, rather than create a pattern.												
<b>Connections to Prior Units:</b>	<b>Connections to Future Units:</b>												
N/A	The next unit will feature some of the same sorting techniques and classification, so this is a good start for												

future units.

**Differentiation through [Universal Design for Learning](#)**

**UDL Indicator**

**Teacher Actions:**

**Recruiting Interest 7.2**

- Provide tasks that allow for active participation, exploration and experimentation

**Supporting Multilingual/English Learners**

**Related [CELP standards:](#)**

**Learning Targets:**

K-1 construct meaning from oral presentations and literary and informational text through grade appropriate listening, reading, and viewing

I can sort objects by color.  
I can recognize a color pattern.

**Lesson Sequence**

**Learning Target Success Criteria/ Assessment**

**Resources**

1

I can name, describe, and sort objects into categories.  
 I can sort by color

*Max and Mo go Apple Picking* by Patricia Lakin  
*Daniel's Apple Picking Adventure* by Maggie Testa

2

I can name, describe, and sort objects into categories.  
 I can recognize a pattern  
 I can create my own pattern

*Pinkalicious: Apples, Apples, Apples* by Victoria Kann  
*Curious George and the Apple Harvest* by H.A. Rey

**Unit Title:**

October  
(Focus: Pumpkins/Leaves)

**Relevant Standards: Bold indicates priority**

C.60.8 Compare relative attributes of objects, people, events, sounds (e.g., louder, more, less)

L.48.13 Demonstrate comprehension through retelling with use of pictures and props, acting out main events or sharing information learned from nonfiction text

M.48.10 Sort and classify objects by one attribute into two or more groups (e.g., color, size, shape)

<b>Essential Question(s):</b>		<b>Enduring Understanding(s):</b>													
<ul style="list-style-type: none"> <li>• What skills and knowledge are needed to support children to use logic and reasoning?</li> <li>• What skills and knowledge are needed to support children to gain book appreciation and knowledge?</li> <li>• What skills and knowledge are needed to understand the attributes and relative properties of objects?</li> </ul>		<ul style="list-style-type: none"> <li>• Compare relative attributes of objects, people, events, sounds</li> <li>• Demonstrate comprehension through retelling</li> <li>• Sort and classify objects by one attribute</li> </ul>													
<b>Demonstration of Learning:</b>		<b>Pacing for Unit</b>													
<ul style="list-style-type: none"> <li>• Card Sort</li> <li>• Attribute Matching</li> </ul>		2 lessons over 1 month													
<b>Family Overview (link below)</b>		<b>Integration of Technology:</b>													
<a href="#">October Family Overview</a>		<i>Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning</i>													
<b>Unit-specific Vocabulary:</b>		<b>Aligned Unit Materials, Resources, and Technology (beyond core resources):</b>													
<table border="1"> <tr> <td>pumpkin</td> <td>seed</td> <td>roots</td> <td>leaf</td> </tr> <tr> <td>bud</td> <td>flower</td> <td>small</td> <td>medium</td> </tr> <tr> <td>large</td> <td>green</td> <td>orange</td> <td>round</td> </tr> </table>		pumpkin	seed	roots	leaf	bud	flower	small	medium	large	green	orange	round	<p>The Pumpkin Patch by Margaret McNamara  <a href="#">Little Pumpkin By Suzanne Fossey</a>  Pete the Cat Falling for Autumn by James Dean  Fry Bread by Kevin Noble Maillard</p>	
pumpkin	seed	roots	leaf												
bud	flower	small	medium												
large	green	orange	round												
<b>Opportunities for Interdisciplinary Connections:</b>		<b>Anticipated misconceptions:</b>													
<ul style="list-style-type: none"> <li>• Science connections with seed to plant growth</li> <li>• Math connections with size comparisons</li> </ul>		<ul style="list-style-type: none"> <li>• Some students may have a mismatch between the oral words and the size of objects.</li> <li>• Some students may have a mismatch between the oral words and the order of events</li> </ul>													
<b>Connections to Prior Units:</b>		<b>Connections to Future Units:</b>													
Relate the science connection to apples (from September lesson)		Matching and sorting will continue to apply in future lessons													
<b>Differentiation through <a href="#">Universal Design for Learning</a></b>															
<b>UDL Indicator</b>		<b>Teacher Actions:</b>													
Recruiting Interest 7.2		<ul style="list-style-type: none"> <li>• Vary activities and sources of information so that they can be: <ul style="list-style-type: none"> <li>○ Socially relevant</li> <li>○ Age and ability appropriate</li> </ul> </li> <li>• Provide tasks that allow for active participation,</li> </ul>													

		exploration and experimentation
<b>Supporting Multilingual/English Learners</b>		
<b>Related <a href="#">CELP standards:</a></b>		<b>Learning Targets:</b>
<b>K.1-</b> Construct meaning from oral presentations and literary and informational text through grade appropriate listening, reading, and viewing.		<ul style="list-style-type: none"> <li>I can identify key attributes within a story.</li> <li>I can retell events from a story.</li> </ul>
Lesson Sequence	Learning Target Success Criteria/ Assessment	Resources
1	I can name, describe, and sort objects into categories. <input type="checkbox"/> I can sort by size	<a href="#">The Pumpkin Patch</a> by Margaret McNamara
2	I can put events in order. <input type="checkbox"/> I can tell what comes first, next, last	<a href="#">Little Pumpkin By Suzanne Fossey</a>  <a href="#">Pete the Cat Falling for Autumn</a> by James Dean

<b>Unit Title:</b>	
November Focus: (Shapes)	
<b>Relevant Standards: Bold indicates priority</b>	
M.48.12 Identify 2-dimensional shapes (starting with familiar shapes such as circle and triangle) in different orientations and sizes C.48.8 Recognize patterns in routines, objects and/or sounds and replicate sequence using objects or language	
<b>Essential Question(s):</b>	<b>Enduring Understanding(s):</b>
<ul style="list-style-type: none"> <li>What skills and knowledge are needed to support children to understand shapes and spatial relationships?</li> <li>What skills and knowledge are needed to support children to recognize patterns in objects?</li> </ul>	<ul style="list-style-type: none"> <li>Identify 2-dimensional shapes</li> <li>Recognize and make patterns</li> </ul>
<b>Demonstration of Learning:</b>	<b>Pacing for Unit</b>
<ul style="list-style-type: none"> <li>Shape “Bingo”</li> <li>Make patterns with shapes</li> <li>Everyday shape matching game</li> </ul>	2 lessons over one month
<b>Family Overview (link below)</b>	<b>Integration of Technology:</b>

<a href="#">November Family Overview</a>		<i>Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning</i>												
<b>Unit-specific Vocabulary:</b>		<b>Aligned Unit Materials, Resources, and Technology (beyond core resources):</b>												
<table border="1"> <tr> <td>circle</td> <td>rectangle</td> <td>triangle</td> <td>square</td> </tr> <tr> <td>diamond</td> <td>octagon</td> <td>pentagon</td> <td>oval</td> </tr> <tr> <td>shape</td> <td>sides</td> <td>line</td> <td>corners</td> </tr> </table>		circle	rectangle	triangle	square	diamond	octagon	pentagon	oval	shape	sides	line	corners	<a href="#">Skippyjon Jones: Shape Up</a> by Judy Schachner <a href="#">National Geographic book on Shapes</a> Thank You, Omu by Oge Mora Gracias, Thanks by Pat Mora Round as a Tortilla by Roseanne Greenfield Thong
circle	rectangle	triangle	square											
diamond	octagon	pentagon	oval											
shape	sides	line	corners											
<b>Opportunities for Interdisciplinary Connections:</b>		<b>Anticipated misconceptions:</b>												
<ul style="list-style-type: none"> <li>• Connections to mathematics through identifying shapes</li> <li>• Connections to creative art through making shapes and patterns</li> <li>• Connections to social studies through recognizing shapes in the community</li> </ul>		Students may look at a shape and only be able to identify it when it looks a certain way (for example, if a triangle has the point on the top vs. on the bottom) Students may also see a color and a shape and then associate that color with that shape moving forward.												
<b>Connections to Prior Units:</b>		<b>Connections to Future Units:</b>												
Pumpkin matching from October will help with shape matching in this unit		Recognizing shapes will assist in future lessons (snowflakes in December, for example)												
<b>Differentiation through <a href="#">Universal Design for Learning</a></b>														
<b>UDL Indicator</b>		<b>Teacher Actions:</b>												
<b>Comprehension 3.1</b>		<ul style="list-style-type: none"> <li>• Anchor instruction by linking to and activating relevant prior knowledge (e.g., using visual imagery, concept anchoring, or concept mastery routines)</li> </ul>												
<b>Supporting Multilingual/English Learners</b>														
<b>Related <a href="#">CELP standards:</a></b>		<b>Learning Targets:</b>												
<b>K.1-</b> Construct meaning from oral presentations and literary and informational text through grade appropriate listening, reading, and viewing.		<ul style="list-style-type: none"> <li>• I can identify basic shapes.</li> <li>• I can recognize shapes in the world.</li> <li>• I can make a pattern.</li> </ul>												
<b>Lesson Sequence</b>	<b>Learning Target Success Criteria/ Assessment</b>	<b>Resources</b>												

1	I can name and identify shapes and colors. <input type="checkbox"/> I can identify and name a square, circle, triangle and rectangle	<a href="#">Skippyjon Jones: Shape Up</a> by Judy Schachner
2	I can sort everyday items by their shape.. <input type="checkbox"/> I can identify and sort a square, circle, triangle, rectangle, oval, diamond, pentagon, octagon <input type="checkbox"/> I can make a pattern with shapes	<a href="#">National Geographic book on Shapes</a> Round as a Tortilla by Roseanne Greenfield Thong

<b>Unit Title:</b>	
December (focus: Snowflakes/Winter)	
<b>Relevant Standards: Bold indicates priority</b>	
L.48.20 Recognize rhyming words in songs, chants or poems S.48.5 Compare and contrast basic features of living things C.48.10 Use or make a prop to represent an object (e.g., build a telephone)	
<b>Essential Question(s):</b>	<b>Enduring Understanding(s):</b>
<ul style="list-style-type: none"> <li>• What skills and knowledge are needed to support children to recognize rhyming words in a book?</li> <li>• What skills and knowledge are needed to support children to compare and contrast basic features of living things?</li> <li>• What skills and knowledge are needed to support children to make a prop to represent an object?</li> </ul>	<ul style="list-style-type: none"> <li>• Recognize rhyming words in a book</li> <li>• Compare and contrast features of living things</li> <li>• Make a prop that represents an object</li> </ul>
<b>Demonstration of Learning:</b>	<b>Pacing for Unit</b>
<ul style="list-style-type: none"> <li>• Rhyming word activity</li> <li>• Compare and contrasting</li> <li>• Building shapes</li> </ul>	2 lessons over 1 month
<b>Family Overview (link below)</b>	<b>Integration of Technology:</b>
<a href="#">December Family Overview</a>	<i>Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning</i>
<b>Unit-specific Vocabulary:</b>	<b>Aligned Unit Materials, Resources, and Technology (beyond core resources):</b>

<table border="1"> <tr> <td>bears</td> <td>hibernate</td> <td>winter</td> <td>snow</td> </tr> <tr> <td>beaver</td> <td>den</td> <td>snowflake</td> <td>snowman</td> </tr> <tr> <td>shape</td> <td>fur</td> <td>nest</td> <td>burrow</td> </tr> </table>				bears	hibernate	winter	snow	beaver	den	snowflake	snowman	shape	fur	nest	burrow	<a href="#">Winter Winter Cold and Snow by Sharon Gibson Palermo</a> <a href="#">The Snowy Day</a> by Ezra Jack Keats When This World Was New by D.H. Figueredo Iguanas in the Snow by Maya Christina Gonzalez
bears	hibernate	winter	snow													
beaver	den	snowflake	snowman													
shape	fur	nest	burrow													
<b>Opportunities for Interdisciplinary Connections:</b>				<b>Anticipated misconceptions:</b>												
<ul style="list-style-type: none"> <li>• Connections to science through learning about animals in the winter</li> <li>• Connections to creative art through using shapes</li> <li>• Connections to literacy through rhyming</li> </ul>				Students may not understand what it means to hibernate or burrow as they don't know what animals do in the winter.												
<b>Connections to Prior Units:</b>				<b>Connections to Future Units:</b>												
Using the shapes learned about in the last unit, students will create a new object.				Comparing and contrasting and learning about animals will provide the foundation for future lessons.												
<b>Differentiation through <a href="#">Universal Design for Learning</a></b>																
<b>UDL Indicator</b>				<b>Teacher Actions:</b>												
<b>Language &amp; Symbols 2.1</b>				<ul style="list-style-type: none"> <li>• Pre-teach vocabulary and symbols, especially in ways that promote connection to the learners' experience and prior knowledge</li> </ul>												
<b>Supporting Multilingual/English Learners</b>																
<b>Related <a href="#">CELP standards:</a></b>				<b>Learning Targets:</b>												
K-2. participate in grade appropriate oral and written exchanges of information, ideas, and analyses, responding to peer, audience, or reader comments and questions.				<ul style="list-style-type: none"> <li>• I can identify one pair of rhyming words</li> <li>• I can identify one way animals stay warm that is different from people</li> <li>• I can use shapes to make another object</li> </ul>												
<b>Lesson Sequence</b>	<b>Learning Target Success Criteria/ Assessment</b>					<b>Resources</b>										
1	I can identify rhyming words.. <ul style="list-style-type: none"> <li><input type="checkbox"/> I can identify rhyming words within a story.</li> </ul> I can compare and contrast what animals do in the winter and what people do in the winter. <ul style="list-style-type: none"> <li><input type="checkbox"/> I can identify which activities animals do to stay warm and which activities humans do to stay warm.</li> </ul>					<a href="#">Winter Winter Cold and Snow by Sharon Gibson Palermo</a>										
2	I can use shapes to make a new object. <ul style="list-style-type: none"> <li><input type="checkbox"/> I can make a winter shape with squares, circles, triangles and rectangles</li> </ul>					<a href="#">The Snowy Day</a> by Ezra Jack Keats										

<b>Unit Title:</b>																
January (Focus: Mittens/Scarves/Snow/People)																
<b>Relevant Standards: Bold indicates priority</b>																
L.48.13 Demonstrate comprehension through retelling with use of pictures and props, acting out main events or sharing information learned from nonfiction text L.48.15 Make predictions and/or ask questions about the text by examining the title, cover, pictures																
<b>Essential Question(s):</b>			<b>Enduring Understanding(s):</b>													
<ul style="list-style-type: none"> <li>What skills and knowledge are needed to support children to demonstrate comprehension through retelling with pictures?</li> <li>What skills and knowledge are needed to support children to make predictions about a book?</li> </ul>			<ul style="list-style-type: none"> <li>Demonstrate comprehension through retelling</li> <li>Making a prediction</li> </ul>													
<b>Demonstration of Learning:</b>			<b>Pacing for Unit</b>													
<ul style="list-style-type: none"> <li>Adding elements to a picture</li> <li>Making a prediction</li> </ul>			2 lessons over one month													
<b>Family Overview (link below)</b>			<b>Integration of Technology:</b>													
<a href="#">January Family Overview</a>			<i>Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning</i>													
<b>Unit-specific Vocabulary:</b>			<b>Aligned Unit Materials, Resources, and Technology (beyond core resources):</b>													
<table border="1"> <tr> <td>jacket</td> <td>zipper</td> <td>scarf</td> <td>snow</td> </tr> <tr> <td>mittens</td> <td>sweater</td> <td>jeans</td> <td>boots</td> </tr> <tr> <td>socks</td> <td>cap</td> <td>sled</td> <td>hill</td> </tr> </table>			jacket	zipper	scarf	snow	mittens	sweater	jeans	boots	socks	cap	sled	hill	<p><u>The Jacket I Wear in the Snow</u> by Shirley Neitzel  <u>Snow Day</u> by Lester L. Laminack  A Sled for Gabo by Emma Otheguy  Sweetest Kulu by Celina Kalluk</p>	
jacket	zipper	scarf	snow													
mittens	sweater	jeans	boots													
socks	cap	sled	hill													
<b>Opportunities for Interdisciplinary Connections:</b>			<b>Anticipated misconceptions:</b>													
<ul style="list-style-type: none"> <li>Connections to literacy through being able to make a prediction and retell a story</li> </ul>			Students may not be familiar with the different articles of clothing in the book. Teacher may have to explain what some of the items are or help use the text to show what they are.													
<b>Connections to Prior Units:</b>			<b>Connections to Future Units:</b>													
The use of shapes will help when it comes to retelling a story as students should be able to identify the shapes			Making predictions will be a skill that is practiced in future units													

Differentiation through <i>Universal Design for Learning</i>		
UDL Indicator	Teacher Actions:	
Recruiting Interest 7.2	<ul style="list-style-type: none"> <li>Provide tasks that allow for active participation, exploration and experimentation</li> </ul>	
Supporting Multilingual/English Learners		
Related <i>CELP standards</i> :	Learning Targets:	
K-2. participate in grade appropriate oral and written exchanges of information, ideas, and analyses, responding to peer, audience, or reader comments and questions.	I can retell a story with pictures. I can make a prediction about a book.	
Lesson Sequence	Learning Target Success Criteria/ Assessment	Resources
1	I can retell a story with pictures. <input type="checkbox"/> I can put the winter clothing on a person to retell a story	<u>The Jacket I Wear in the Snow</u> by Shirley Neitzel
2	I can make a prediction about what a book will be about.. <input type="checkbox"/> I can look at the cover and pictures of a book and make a guess on what the story is about.	<u>Snow Day</u> by Lester L. Laminack

Unit Title:	
February (Focus: Teddy Bears)	
Relevant Standards: <b>Bold indicates priority</b>	
M.48.10 Sort and classify objects by one attribute into two or more groups (e.g. color, size, shape).  C.48.7 Identify similarities and differences in objects, people, events, sounds based on one attribute (e.g., same or different colors, loud or soft sound.)  L. 60.2 Determine the meanings of unknown words/concepts using the context of conversations, pictures or concrete objects	
Essential Question(s):	Enduring Understanding(s):

<ul style="list-style-type: none"> <li>• What skills and knowledge are needed to support children to understand the attributes and relative properties of objects?</li> <li>• What skills and knowledge are needed to support children to identify similarities and differences?</li> <li>• What skills and knowledge are needed to support children to determine the meanings of unknown words/concepts using the context of conversations, pictures or concrete objects?</li> </ul>	<p>Understand the attributes of objects such as color Use logic to sort objects by color Determine what words are opposites</p>												
<p><b>Demonstration of Learning:</b></p>	<p><b>Pacing for Unit</b></p>												
<ul style="list-style-type: none"> <li>• Sorting and identifying by color</li> <li>• Identifying opposite words</li> </ul>	<p>2 lessons over one month</p>												
<p><b>Family Overview (link below)</b></p>	<p><b>Integration of Technology:</b></p>												
<p><a href="#">February Family Connection</a></p>	<p><i>Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning</i></p>												
<p><b>Unit-specific Vocabulary:</b></p>	<p><b>Aligned Unit Materials, Resources, and Technology (beyond core resources):</b></p>												
<table border="1"> <tr> <td>opposites</td> <td>over</td> <td>under</td> <td>color</td> </tr> <tr> <td>fancy</td> <td>fast</td> <td>slow</td> <td>forgot</td> </tr> <tr> <td>plain</td> <td>short</td> <td>tall</td> <td>remember</td> </tr> </table>	opposites	over	under	color	fancy	fast	slow	forgot	plain	short	tall	remember	<p><u>What's Up Bear</u> by Frieda Wishinsky <u>Brown Bear Brown Bear What do you See?</u> by Eric Carle <u>Corduroy</u> by Don Freeman The Worst Teddy Ever by Marcelo Verdad</p>
opposites	over	under	color										
fancy	fast	slow	forgot										
plain	short	tall	remember										
<p><b>Opportunities for Interdisciplinary Connections:</b></p>	<p><b>Anticipated misconceptions:</b></p>												
<ul style="list-style-type: none"> <li>• Connections to literacy through being able to identify opposite words</li> <li>• Connections to art to identify colors</li> </ul>	<ul style="list-style-type: none"> <li>• Students may get confused when the animals in the book are different colors that they are used to</li> <li>• Students may not know the word “opposite”</li> </ul>												
<p><b>Connections to Prior Units:</b></p>	<p><b>Connections to Future Units:</b></p>												
<p>Colors have been used in prior units (shapes), so this will build off identifying the colors and now sorting by color as well.</p>	<p>Practicing sorting and classifying will connect with future lessons.</p>												
<p><b>Differentiation through <i>Universal Design for Learning</i></b></p>													
<p><b>UDL Indicator</b></p>	<p><b>Teacher Actions:</b></p>												
<p><b>Comprehension 3.1</b></p>	<p>Anchor instruction by linking to and activating relevant prior knowledge</p>												
<p><b>Supporting Multilingual/English Learners</b></p>													
<p><b>Related <i>CELP standards:</i></b></p>	<p><b>Learning Targets:</b></p>												

K-2 participate in grade appropriate oral and written exchanges of information, ideas, and analyses, responding to peer, audience, or reader comments and questions.		I can state the opposite to a word I can identify and sort colors
Lesson Sequence	Learning Target Success Criteria/ Assessment	Resources
1	I can identify opposite words. <input type="checkbox"/> I can state a word that is the opposite of another word	<u>What's Up Bear</u> by Frieda Wishinsky
2	I can identify colors. <input type="checkbox"/> I can correctly identify 10 different colors. <input type="checkbox"/> I can sort objects based on their color	<u>Brown Bear Brown Bear What do you See?</u> by Eric Carle  <u>Corduroy</u> by Don Freeman

<b>Unit Title:</b>	
March (Focus: Robots)	
<b>Relevant Standards: Bold indicates priority</b>	
S.48.8 Investigate how objects' speed and direction can be varied S.48.9 Compare and contrast attributes of common materials related to their function (e.g., flexibility, transparency, strength) C.48.7 Identify similarities and differences in objects, people, events, sounds based on one attribute (e.g., same or different colors, loud or soft sound.)	
<b>Essential Question(s):</b>	<b>Enduring Understanding(s):</b>
<ul style="list-style-type: none"> <li>• What skills and knowledge are needed to support children to understand physical sciences?</li> <li>• What skills and knowledge are needed to support children to identify similarities and differences?</li> </ul>	Making a prediction Conducting an experiment Comparing and contrasting different materials
<b>Demonstration of Learning:</b>	<b>Pacing for Unit</b>
Experimentation with rolling different objects Experimentation with different materials	2 lessons over one month
<b>Family Overview (link below)</b>	<b>Integration of Technology:</b>
<a href="#">March Family Overview</a>	<i>Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning</i>

<b>Unit-specific Vocabulary:</b>		<b>Aligned Unit Materials, Resources, and Technology (beyond core resources):</b>													
<table border="1"> <tr> <td>robot</td> <td>prediction</td> <td>material</td> <td>object</td> </tr> <tr> <td>experiment</td> <td>compare</td> <td>junkyard</td> <td>science</td> </tr> <tr> <td>guess</td> <td>contrast</td> <td>space</td> <td>scientist</td> </tr> </table>		robot	prediction	material	object	experiment	compare	junkyard	science	guess	contrast	space	scientist	<p>The Adventures of Otto: Go, Otto Go by David Milgirm  <a href="#">Meep and Clank Blast Off by David Vordtriede</a>  Junk Yard by Mike Austin  Imagination Like Mine by Latashia M. Perry</p>	
robot	prediction	material	object												
experiment	compare	junkyard	science												
guess	contrast	space	scientist												
<b>Opportunities for Interdisciplinary Connections:</b>		<b>Anticipated misconceptions:</b>													
Connection to science: experimenting, comparing and contrasting and learning about different materials		Students may not know all of the materials and think they are the same (for example a sheet of aluminum foil looks the same as paper)													
<b>Connections to Prior Units:</b>		<b>Connections to Future Units:</b>													
Trying to predict the outcome of something is the same as making a prediction (as seen in previous lessons)		Predictions will continue to be made, but we have now added on an experiment piece. This will connect with future lessons.													
<b>Differentiation through <a href="#">Universal Design for Learning</a></b>															
<b>UDL Indicator</b>		<b>Teacher Actions:</b>													
<b>Language &amp; Symbols 2.1</b>		<ul style="list-style-type: none"> <li>Pre-teach vocabulary and symbols, especially in ways that promote connection to the learners' experience and prior knowledge</li> </ul>													
<b>Supporting Multilingual/English Learners</b>															
<b>Related <a href="#">CELP standards:</a></b>		<b>Learning Targets:</b>													
K-4 construct grade appropriate oral and written claims and support them with reasoning and evidence.		I can make a prediction and talk about it I can indicate what is the same or different about two materials													
<b>Lesson Sequence</b>	<b>Learning Target Success Criteria/ Assessment</b>	<b>Resources</b>													
1	I can make a prediction and determine if my prediction was correct. <input type="checkbox"/> I can conduct an experiment based on my prediction.	<a href="#">The Adventures of Otto: Go, Otto Go</a> by David Milgirm  <a href="#">Meep and Clank Blast Off by David Vordtriede</a>													
2	I can compare and contrast.	<a href="#">Junk Yard</a> by Mike Austin													

	<input type="checkbox"/> I can discuss what is the same and what is different about two different materials.	
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**Unit Title:**

April  
(Focus: Ladybugs/Butterflies)

**Relevant Standards: Bold indicates priority**

S.48.6 Recognize changes in living things over their lifespan by observing similarities and differences between babies and adults  
L.48.15 Make predictions and/or ask questions about the text by examining the title, cover, pictures  
S.48.7 Explore how animals depend upon the environment for food, water and shelter

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

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>• What skills and knowledge are needed to support children to recognize changes in living things?</li> <li>• What skills and knowledge are needed to support children to make a prediction?</li> <li>• What skills and knowledge are needed to support children to explore how animals depend on their environment?</li> </ul> | <ul style="list-style-type: none"> <li>• Making a prediction</li> <li>• Understanding sequence of events</li> <li>• Understanding how insects and animals live and survive</li> </ul> |
|---|---|

**Demonstration of Learning:** **Pacing for Unit**

Putting the life cycle in order Matching symmetry Making predictions	2 lessons over one month
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**Family Overview (link below)** **Integration of Technology:**

<a href="#">April Family Overview</a>	<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):**

caterpillar	dragonfly	egg	symmetry	<u>The Very Hungry Caterpillar</u> by Eric Carle <u>The Furry Caterpillar</u> by Felicia Law <a href="#">Guess the Insect by Kari Noel</a> Senorita Mariposa - Ben Gundersheimer
ladybug	honeybee	Praying mantis	mosquito	
stick bug	earwig	larvae	butterfly	

**Opportunities for Interdisciplinary Connections:** **Anticipated misconceptions:**

<ul style="list-style-type: none"> <li>• Connections to science by learning about the butterfly life cycle</li> <li>• Connections to art by understanding symmetry</li> </ul>	Students may not realize that a caterpillar and a butterfly are the same creature, just in two different forms. It may require some explaining. Students likely will not know all of the bugs in the book, but	
<b>Connections to Prior Units:</b>	<b>Connections to Future Units:</b>	
Making predictions is something that we have done before, in a different context.	We will continue to make predictions and put events in order as we go through different units.	
<b>Differentiation through <a href="#">Universal Design for Learning</a></b>		
<b>UDL Indicator</b>	<b>Teacher Actions:</b>	
<b>Expression &amp; Communication 5.1</b>	Use physical manipulatives	
<b>Supporting Multilingual/English Learners</b>		
<b>Related <a href="#">CELP standards:</a></b>	<b>Learning Targets:</b>	
K-4 Construct grade appropriate oral and written claims and support them with reasoning and evidence.	I can put events in order I can match pieces of a butterfly I can make a prediction	
<b>Lesson Sequence</b>	<b>Learning Target Success Criteria/ Assessment</b>	<b>Resources</b>
1	I can put events in order. <input type="checkbox"/> I can tell what comes first, next, last I can understand symmetry. <input type="checkbox"/> I can match pieces based on symmetry	<a href="#">The Very Hungry Caterpillar</a> by Eric Carle  <a href="#">The Furry Caterpillar</a> by Felicia Law
2	I can make a prediction about a book. <input type="checkbox"/> Based on the picture and my prior knowledge, I can identify insects in a book.	<a href="#">Guess the Insect</a> by Kari Noel

<b>Unit Title:</b>	
May (Focus: Water Fun/Ducks)	
<b>Relevant Standards: Bold indicates priority</b>	
C.48.11 Act out actions or scenarios involving familiar roles (e.g., teacher, doctor, firefighter) L.48.21 Identify when initial sounds in words are the same L.48.15 Make predictions and/or ask questions about the text by examining the title, cover, pictures	
<b>Essential Question(s):</b>	<b>Enduring Understanding(s):</b>

<ul style="list-style-type: none"> <li>• What skills and knowledge are needed to support children to act out actions or scenarios involving familiar roles?</li> <li>• What skills and knowledge are needed to support children to identify when initial sounds in words are the same?</li> <li>• What skills and knowledge are needed to support children to make predictions about the end of the book?</li> </ul>	<ul style="list-style-type: none"> <li>• Acting in roles based on a text</li> <li>• Knowing the first letter of their name</li> <li>• Making a prediction</li> </ul>												
<b>Demonstration of Learning:</b>	<b>Pacing for Unit</b>												
<ul style="list-style-type: none"> <li>• Role playing</li> <li>• Identifying the first letter sounds</li> <li>• Making a prediction</li> </ul>	3 lessons over 1.5 months												
<b>Family Overview (link below)</b>	<b>Integration of Technology:</b>												
<a href="#">May Family Overview</a>	<i>Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning</i>												
<b>Unit-specific Vocabulary:</b>	<b>Aligned Unit Materials, Resources, and Technology (beyond core resources):</b>												
<table border="1"> <tr> <td>duck</td> <td>nibble</td> <td>egg</td> <td>quack</td> </tr> <tr> <td>rescue</td> <td>knock</td> <td>ordinary</td> <td>flock</td> </tr> <tr> <td>sheep</td> <td>hope</td> <td>quiet</td> <td>flair</td> </tr> </table>	duck	nibble	egg	quack	rescue	knock	ordinary	flock	sheep	hope	quiet	flair	<u>Duck to the Rescue</u> by John Himmelman <u>Click, Clack, Quackity-Quack</u> by Doreen Cronin and Betsy Lewin <u>Duck at the Door</u> by Jackie Urbanovic Lala's Words by Gracey Zhang
duck	nibble	egg	quack										
rescue	knock	ordinary	flock										
sheep	hope	quiet	flair										
<b>Opportunities for Interdisciplinary Connections:</b>	<b>Anticipated misconceptions:</b>												
<ul style="list-style-type: none"> <li>• Connections to literacy through being able to make a prediction and identify the first letter of their name</li> </ul>	Students may hear a letter sound but not make the connection to their own name, especially if that letter has different sounds (S, C, CH, K, etc.)												
<b>Connections to Prior Units:</b>	<b>Connections to Future Units:</b>												
We have made predictions in the past based on the cover and pictures. This takes it a step further and asks to make a future prediction based on the story.	Identifying letters and making connections to their name is an important skill for a student. There will be more focus on letters and letter writing in the future.												
<b>Differentiation through <i>Universal Design for Learning</i></b>													
<b>UDL Indicator</b>	<b>Teacher Actions:</b>												
<b>Expression &amp; Communication 5.1</b>	<ul style="list-style-type: none"> <li>• Solve problems using a variety of strategies</li> </ul>												
<b>Supporting Multilingual/English Learners</b>													
<b>Related <i>CELP standards:</i></b>	<b>Learning Targets:</b>												

K-3 Speak and write about grade-appropriate complex literary and informational texts and topics		I can act out the role of the main character in a story. I can identify the first letter of my name. I can make a prediction about a book.
Lesson Sequence	Learning Target Success Criteria/ Assessment	Resources
1	I can act out a story <input type="checkbox"/> I can be “duck” in different situations and show how to come to the rescue.	<u>Duck to the Rescue</u> by John Himmelman
2	I can identify a letter and make a connection to that letter <input type="checkbox"/> I can recognize the first letter of my name.	<u>Click, Clack, Quackity-Quack</u> by Doreen Cronin and Betsy Lewin
3	I can make a prediction about a book. <input type="checkbox"/> I can make a prediction about what will happen after the end of the book.	<u>Duck at the Door</u> by Jackie Urbanovic

## Policy 1326 Community/Board Operation

### POLICY REGARDING ALCOHOL AT ROCKWELL THEATER EVENTS

Notwithstanding the provisions of Board Policies 1316, 3515 and 4218.231, and the provisions of Board Regulations 1324 and 1325, the Board of Education (the "Board") permits the consumption and possession of alcoholic beverages by persons who have attained the age of twenty-one (21 ) for BPRYCS(1) sponsored events held at the Rockwell Theater located in the Bristol Arts and Innovation Magnet School. Alcohol may only be sold and/or distributed at such events by BPRYCS approved vendors that have obtained the licensing and/or permitting required under the law.

Employees are only permitted to attend City-sponsored and Board-permitted events held at the Rockwell Theater in their capacity as a private citizen outside of their contractual work hours and during non-instructional time. Adults who consume alcoholic beverages at such events are expected to drink responsibly. The excessive consumption of alcohol is prohibited at all times.

(1) BPRYCS stands for Bristol Parks, Recreation, Youth and Community Services

## Students

### Discipline

#### **Physical Exercise and Discipline of Students**

The Board of Education (Board) recognizes that a positive approach toward exercise and physical activity is important to the health and well-being of students. All aspects of the school experience should encourage students to have a healthy attitude toward exercise and promote the life-long enjoyment of physical activity. Therefore, when school employees impose disciplinary consequences for student misconduct during the regular day, the following restrictions shall apply:

#### **1. Loss of Recess as Disciplinary Consequence**

Except as provided below, school employees may NOT prevent a student in elementary school from participating in recess or in other sustained opportunities for physical activity during classroom learning as a form of discipline. Recess and other physically active learning opportunities may include movement-oriented learning activities in the academic environment, physical activity breaks, and regularly scheduled school wide routines and events that engage students in physical activity that is the time devoted each day (at least 20 minutes) to physical exercise in the District's elementary schools.

School employees may prevent or restrict recess when:

- a. a student poses a danger to the health or safety of other students or school personnel or
- b. it is limited to the shorter recess period if there are two or more recess periods in the school day, so long as the student is allowed to participate in at least 20 minutes of physical activity during the school day.

Recess prevention or restriction may be imposed only once during a school week unless the student is a danger to the health or safety of other students or school personnel. Recess prevention or restriction is not allowed for a student's failure to complete work on time or for a student's academic performance.

This policy distinguishes between; a) discipline that is imposed before recess begins and; b) discipline imposed during recess or methods used to redirect a student's behavior during recess. School personnel may impose discipline during recess as a result of a student's behavior during such time if such discipline is in accordance with Board policies and procedures. School personnel may also use methods to redirect a student's behavior, in the event such behavior warrants redirection, during recess. For clarity, the prohibition against preventing or restricting a student's participation in the time devoted to recess shall apply to student conduct that occurs prior to the recess time, rather than during the recess time.

Recess restriction must be approved in writing by the building administration prior to the imposition of the discipline. Such approval may be granted only when a student poses a danger to the health or safety of other students. Parents must be notified if students are kept from participating in recess.

#### **2. Physical Activity as Punishment**

School employees may NOT require students enrolled in grades K-12, inclusive, to engage in physical activity as a form of discipline during the school day.

### **3. Wellness Instruction**

School employees shall not prevent students from participating in physical exercise or undirected play during wellness instruction as a form of discipline.

At no time shall an entire class be prevented from participating in wellness instruction or physical exercise activity as a disciplinary consequence.

Nothing in this policy shall prevent a school employee from acting in accordance with an Individualized Education Plan (IEP) developed by the student's Planning and Placement Team (PPT).

For the purpose of this policy, "school employee" means a teacher, substitute teacher, school administrator, school superintendent, guidance counselor, school counselor, psychologist, social worker, nurse, physician, school paraprofessional or coach employed by the Board or working in a public elementary, middle or high school; or any other individual who, in the performance of his or her duties, has regular contact with students and who provides services to, or on behalf of students enrolled in a public elementary, middle or high school, pursuant to a contract with the Board.

*Any employee who fails to comply with this policy will be subject to discipline, up to and including termination of employment. Any contracted individual who provides services to or on behalf of District students and who fails to comply with the requirements of this policy may be subject to having his/her contract for services suspended by the district.*

The Superintendent of Schools shall develop an administrative regulation with detailed directions that puts this policy into practice. The regulation shall be shared with the BOE and be included with this policy. The Superintendent of Schools shall report updates pursuant to the implementation of this policy and administrative regulations to the Board in relevant Board of Education meetings.

(cf. [6142.10](#) - Health Education Program) (cf. [6142.101](#) - Wellness)

(cf. [6142.61](#) - Physical Activity)

(cf. [6142.6](#) - Physical Education)

Legal Reference: Connecticut General Statutes

[10-221o](#) Lunch periods. Recess

[10-221u](#) Boards to adopt policies addressing the use of physical activity as discipline. PA 22-81 An Act Expanding Preschool and Mental and Behavioral Services for Children

**Policy adopted:**