Curriculum Unit Overviews

Courses Ready for Board of Education Adoption in June 2024

Mathematics	Wellness	World Language
● *Grade 7 Pre-Algebra* ● *Grade 8&9 Algebra I*	● *Grade 6 P.E.* ● *Grade 7 P.E.* ● *Grade 8 P.E.* ● *Leisure P.E.* ● *Lifetime Pursuits*	● *Grade 7 Spanish* ● *Grade 8 French*

Grade 7 Pre-Algebra Curriculum Overview

Unit A *Proportional Drawings and Relationships*	In this unit, students study scaled copies of pictures and plane figures, then apply what they have learned to scale drawings (maps and floor plans). Students begin by looking at copies of pictures and use their own words to describe what differentiates scaled and non-scaled copies of a picture. As the unit progresses, students learn that all lengths in a scaled copy are multiplied by a scale factor and all angles stay the same. They draw scaled copies of figures. They learn that if the scale factor is greater than 1, the copy will be larger, and if the scale factor is less than 1, the copy will be smaller. Next, students see that the principles and strategies that they used to reason about scaled copies of figures can be used with scale drawings. They work with scales that involve units (e.g., "1 cm represents 10 km"), and scales that do not include units (e.g., "the scale is 1 to 100"). They understand that actual lengths are products of a scale factor and corresponding lengths in the scale drawing, thus lengths in the drawing are the product of the actual lengths and the reciprocal of that scale factor. The second portion of this unit focuses on understanding what a proportional relationship is, how it is represented, and what types of contexts give rise to proportional relationships. In a table of equivalent ratios, a multiplicative relationship between the pair of rows is given by a scale factor. By contrast, the multiplicative relationship between the columns is given by a unit rate. The relationship between pairs of values in the two columns is called a *proportional relationship*, the unit rate that describes this relationship is called a *constant of proportionality,* and the quantity represented by the right column is said to be *proportional to* the quantity represented by the left. Students learn that any proportional relationship can be represented by an equation of the form $y=kx$ where k is the constant of proportionality, that its graph lies on a line through the origin and that the constant of proportionality indicates the steepness of the line. By the end of the unit, students should be able to easily work with common contexts associated with proportional relationships (such as constant speed, unit pricing, and measurement conversions) and be able to determine whether a relationship is proportional or not. Throughout the unit, they discuss their mathematical ideas and respond to the ideas of others. In the culminating PBA of this unit, students make a floor plan of a room of their choice. This is an opportunity for them to apply what they have learned in the unit to everyday life. **Profile of a Graduate Capacities:** Collective Intelligence, Product Creation
Unit B *Measuring Circles*	In this brief unit students apply their knowledge of proportional relationships to the study of circles. The unit begins with activities designed to help students come to a more precise understanding of the characteristics of a circle. Students measure circular objects, investigating the relationship between measurements of circumference and diameter by making tables and graphs. Next, students encounter at least one informal derivation of the fact that the area of a circle is equal to times the square of its radius. Students select and use formulas for the area and circumference of a circle to solve abstract and real-world problems that involve calculating lengths and areas. They express measurements in terms of pi or using appropriate approximations of pi to express them numerically. Finally, students work with volume, using abilities developed in earlier work with geometry and geometric measurement to calculate the volume of a sphere, a cylinder, and a cone.

	The PBA about stained glass windows gives students an opportunity to once again use their collective intelligence to inform their solution. They are asked to create a design with specific criteria and support their choices through mathematics.

Profile of a Graduate Capacities: Collective Intelligence, Product Creation |
| <u>Unit C</u>

Proportional Relationships and Percents | In this unit, students deepen their understanding of ratios, scale factors, unit rates (constants of proportionality), and proportional relationships, using them to solve multi-step problems that are set in a wide variety of contexts that involve fractions,decimals and percentages. Throughout the unit students work together to make sense of problems and create solutions.

The unit begins by revisiting scale factors and proportional relationships, each of which has been the focus of a previous unit. Both of these concepts can be used to solve problems that involve equivalent ratios. However, it is often more efficient to view equivalent ratios as pairs that are in the same proportional relationship rather than seeing one pair as obtained by multiplying both entries of the other by a scale factor. From the proportional relationship perspective, all that is needed is the constant of proportionality—which is the same for every ratio in the proportional relationship.

Next students learn about percent increase and decrease. Students consider situations for which percentages can be used to describe a change relative to an initial amount, e.g., prices before and after a 25% increase. They begin by considering situations with unspecified amounts. They next consider situations with a specified amount and percent change, or with initial and final amounts, using double number line diagrams to find the unknown amount or percent change. Next, they use equations to represent such situations, using the distributive property to show that different expressions for the same amount are equivalent.

Students work with long division to make connections between fraction and decimal representation.

Students then use their abilities to find percentages and percent rates to solve problems that involve sales tax, tip, discount, markup, markdown, and commission and percent error.

The PBA, In the News, gives students an opportunity to examine current news using new skills involving percents especially those using percent increase/decrease. They will work with a partner to pose and solve questions creating a visual display of their solution as they have throughout the unit.

Profile of a Graduate Capacities: Collective Intelligence, Product Creation |
| <u>Unit D</u>

Rational Number Arithmetic | This unit begins by revisiting ideas familiar from grade 6: how signed numbers are used to represent quantities such as measurements of temperature and elevation, opposites (pairs of numbers on the number line that are the same distance from zero), and absolute value.

 Next, students extend addition and subtraction from fractions to all rational numbers. They begin by considering how changes in temperature and elevation can be represented—first with tables and number line diagrams, then with addition and subtraction expressions and equations. Initially, physical contexts provide meanings for sums and differences that include negative numbers. Students work with numerical addition and subtraction expressions and equations, becoming more fluent in computing sums and |

| | differences of signed numbers.   Using the meanings that they have developed for addition and subtraction of signed numbers, they write equivalent numerical addition and subtraction expressions, e.g., -8 + (-3) and -8 - 3 ; and they write different equations that express the same relationship.

Next students study multiplication and division. They build understanding of these operations through repeated addition of signed numbers and by examining patterns. Later, in the process of solving problems set in contexts , they write and solve multiplication and division equations.

By this point students will need practice using all four operations on rational numbers, making use of structure, e.g., to see without calculating that the product of two factors is positive because the values of the factors are both negative. They solve problems that involve interpreting negative numbers in context, for instance, when a negative number represents a rate at which water is flowing . They begin working with linear equations in one variable that have rational number coefficients. At first the focus is representing situations with equations and what it means for a number to be a solution for an equation, rather than methods for solving equations. Such methods are the focus of a later unit.

During the Stock Market PBA students select a group of stocks, track their value and then compare the percent increase/decrease in value to that of their peers to determine a winner.

Profile of a Graduate Capacities: Analyzing |
| **Unit E**
Expressions, Equations and Inequalities | Students begin by representing relationships of two quantities with tape diagrams and with equations noticing that one tape diagram can be described by different (but related) equations. The two main types of situations examined can be modeled with the equations of the form $px + q = r$ and $p(x + q) = r$, where p, q, and r are rational numbers.

Next, students solve equations of the forms $px + q = r$ and $p(x + q) = r$, then solve problems that can be represented by such equations. They begin by considering balanced and unbalanced "hanger diagrams," matching hanger diagrams with equations, and using the diagrams to understand two algebraic steps in solving equations of the form $px + q = r$: subtract the same number from both sides, then divide both sides by the same number. Like a tape diagram, the same balanced hanger diagram can be described by different (but related) equations, e.g. $2(x + 3) = 18$, and $2x + 6 = 18$. They use the distributive property to transform an equation of one form into the other and note how such transformations can be used strategically in solving an equation .

Students also work with inequalities. They begin by examining values that make an inequality true or false, and using the number line to represent values that make an inequality true. They solve equations, examine values to the left and right of a solution, and use those values in considering the solution of a related inequality. Finally, students solve inequalities that represent real-world situations.

Students also work with equivalent linear expressions, using properties of operations to explain equivalence . They represent expressions with area diagrams, and use the distributive property to justify factoring or expanding an expression. |

	Finally, students examine equations with variables on both sides of the equation. The goal is to become fluent at examining the equation before attempting to solve it to determine if there is one, none or an infinite number of solutions. As with the equations and inequalities previously worked on in this unit, students are expected to solve these equations by showing a solution pathway that demonstrates an understanding of equality in equations as well as in expressions. The PBA is an error analysis where students identify common errors and communicate the error to the reader. **Profile of a Graduate Capacities:** Analyzing
Unit F *Geometry (Angles, Prisms and Transformations)*	In this unit students briefly 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". Parallel lines and the angles that result when there is a transversal are examined. Students see a simple proof for finding the angle sum of a triangle and then use this property to solve problems including those with exterior angles. The work gives them practice working with rational numbers and equations for angle relationships. Next, moving on to three dimensional objects, students analyze and describe cross-sections of prisms, pyramids, and polyhedra. They understand and use the formula for the volume of any prism, and solve problems involving area, surface area, and volume of prims. The students will use their geometry skills in the Poster Packaging PBA where they analyze a given box and improve upon it based on their own criteria. The unit also includes a study of rigid transformations including dilations, rotations, reflections and translations. Students pay particular attention to similarities and differences between the image and its new image. This topic is an 8th grade standard and teachers, as a team, may decide to teach it out of sequence at another point later in the year. **Profile of a Graduate Capacities:** Analyzing
Unit G *Beyond Rational Numbers*	This unit focuses exclusively on topics that come from grade 8 math standards. Students begin by 'discovering' the rules for working with expressions with exponents. This work continues as we work with scientific notation. Students learn that expressing very large or small numbers in scientific notation can make computation with those numbers much more manageable. Along with becoming fluent with converting between standard and scientific notation, students solve problems that involve any of the four operations and scientific notation. Finally, the students learn about irrational numbers, especially estimating their values, so they are prepared to use them while working with the Pythagorean Theorem in both two and three dimensional space. **Profile of a Graduate Capacities:** Analyzing
Unit H *Probability and Sampling*	In this unit, students 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 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 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.

The PBA, Kitten Simulation, offers students a chance to develop their own model for a simulation. They will run their simulation and then compare their results with that of their classmates.

Profile of a Graduate Capacities: Analyzing

Grade 8 & 9 Algebra I Curriculum Overview

Unit 1 (HS) *One-Variable Statistics*	The unit begins with an opportunity for students to review ideas from previous courses while taking the analysis of the data displays a little deeper. The lessons build on student understanding gained in middle school grades of statistical variability, ability to describe distributions, and informally comparing distributions. They represent and interpret data using data displays such as dot plots, histograms, and box plots. They describe distributions using the appropriate terminology such as "symmetric," "skewed," "uniform," "bimodal," and "bell-shaped." They create data displays and calculate summary statistics using technology, then interpret the values in context. They recognize a relationship between the shape of a distribution and the mean and median. They compare data sets with different measures of variability and interpret data sets with greater interquartile ranges as having greater variability. Students explore outliers and compare data sets using measures of center and measures of variability. They recognize outliers, investigate their source, make decisions about excluding them from the data set, and understand how the presence of outliers impacts measures of center and measures of variability. Lastly, students get a chance to practice their skills by collecting data and analyzing the values. In the culminating activity, students pose and answer a statistical question by designing an experiment, collecting data, and analyzing data. **Profile of a Graduate Capacities:** Analyzing
Unit 1 (MS) *Pre-Algebra Topics*	This unit focuses on linear relationships and the connection between situations, tables, equations, and graphs. The unit begins with an introduction to a slope triangle and establishes that the quotient of the vertical side length and the horizontal side length does not depend on the triangle; this number is called the slope of a line. Next, students revisit the different representations of proportional relationships (graphs, tables, and equations) and the role of the constant of proportionality in each representation and how it may be interpreted in context. Next, students are introduced to "rate of change" as a way to describe the rate per 1 in a linear relationship and note that its numerical value is the same as that of the slope that represents the relationship. Students next consider negative slopes and the slopes of vertical and horizontal lines. Students practice graphing linear functions using the slope and the vertical intercept. Students practice writing equations of lines from a graph, a table, a situation, and from two specific points. The unit concludes with students transforming equations into slope-intercept form. **Profile of a Graduate Capacities:** Product Creation
Unit 2 (HS) *Linear Equations, Inequalities & Systems*	The unit begins with students learning to think of equations as a way to represent constraints or limitations on quantities. Students also see that graphs of equations can help us make sense of constraints and identify values that satisfy them. Next, students investigate different ways to express the same relationship or constraint - by analyzing and writing equivalent equations. They look at moves than can transform one equation to an equivalent equation, recognizing that these are the moves we make to solve equations. The focus here is not only on identifying acceptable moves for solving, but also on explaining why these moves keep each subsequent equation true and maintain the solutions of the original equation. Next, students encounter situations that involve two or more constraints and realize that systems of equations are helpful for representing these constraints. Students learn to solve systems of equations by elimination and explain why the steps taken to

	eliminate a variable are valid. Additionally, students reinforce their awareness that a system of equations could have one solution, no solutions, or infinitely many solutions. Finally, students explore inequalities in one and two variables. They see that inequalities are a handy way to express constraints and can be satisfied by a range of values rather than a single value. Students see that a solution to an inequality is a value or a pair of values that make the inequality true and that the solution to a system of inequalities is any pair of values that make both inequalities to the system true. **Profile of a Graduate Capacities:** Product Creation
Unit 2 (MS) *Linear Equations, Inequalities & Systems*	The unit begins with students learning to think of equations as a way to represent constraints or limitations on quantities. Students also see that graphs of equations can help us make sense of constraints and identify values that satisfy them. Next, students investigate different ways to express the same relationship or constraint - by analyzing and writing equivalent equations. They look at moves than can transform one equation to an equivalent equation, recognizing that these are the moves we make to solve equations. The focus here is not only on identifying acceptable moves for solving, but also on explaining why these moves keep each subsequent equation true and maintain the solutions of the original equation. Next, students encounter situations that involve two or more constraints and realize that systems of equations are helpful for representing these constraints. Students learn to solve systems of equations by elimination and explain why the steps taken to eliminate a variable are valid. Additionally, students reinforce their awareness that a system of equations could have one solution, no solutions, or infinitely many solutions. Finally, students explore inequalities in one and two variables. They see that inequalities are a handy way to express constraints and can be satisfied by a range of values rather than a single value. Students see that a solution to an inequality is a value or a pair of values that make the inequality true and that the solution to a system of inequalities is any pair of values that make both inequalities to the system true. **Profile of a Graduate Capacities:**
Unit 3 *Two-Variable Statistics*	The unit begins with categorical data arranged in two-way tables that students are asked to analyze. Students then examine the relative frequencies of the combinations of those categorical variables.Students find the relative frequencies for combinations relative to the whole data set, as well as row or column relative frequencies to look at subgroups within categories. The row and column relative frequency tables are ultimately used to find evidence to determine if any associations are present in the data. The unit then transitions to bivariate numerical data, which are visualized using scatter plots and lines of best fit. Students use technology to compute the lines of best fit and observe how well the linear models match the data. Correlation coefficients are used to quantify the goodness of fit for linear models. The unit closes with an exploration of the difference between correlation and causal relationships, as well as an opportunity to apply this learning to areas of interest, like anthropology and sports.

Grade 8 & 9 Algebra I Curriculum Overview   2024-2025

	Profile of a Graduate Capacities: Analyzing
Unit 4 *Functions*	In this unit, students expand and deepen their understanding of functions. They develop new knowledge and skills for communicating about functions clearly and precisely, investigate different kinds of functions, and hone their ability to interpret functions. Students also use functions to model a wider variety of mathematical and real-world situations. The unit opens with a refresher on what functions are and what they are not. Students use descriptions, tables, and graphs to reason about the idea of "exactly one output for each input." Then, students learn that function notation is an efficient way to communicate succinctly about functions and devote some focused time to interpret this new notation and use it. They continue this work throughout the unit, employing the notation to perform increasingly sophisticated mathematical work: to analyze and compare functions, to write rules of functions (primarily linear functions), to solve for an input, to graph functions, and more. Next, students focus their attention on graphs of functions and on how they help to tell stories about the relationships between the quantities in the functions. Students interpret features of graphs and relate them to features of situations, using terms such as "maximum," "minimum," and "intercepts" to describe their observations. From a graph, students can see intervals where the values of a function increase or decrease. They learn to use average rates of change to more precisely describe how quickly these values rise or fall. Students also sketch graphs to depict qualitative behavior of functions. Students then go on to take a closer look at the input and output of a function. They think about possible and reasonable input and output values and learn to identify the domain and range of a function based on contextual and graphical information. This new awareness of input and output in turn helps students make sense of piecewise-defined functions, in which different rules apply to different intervals of the domain, producing different sets of output values. Two variations of piecewise functions are studied here: step functions and absolute value functions. The latter are introduced with the idea of absolute errors as an entry point. Thinking about "how far away from a value" primes students to regard the absolute value function as a distance function. The graph of such a function is a distinct V shape, which is convenient for noticing the graphical effects of changing an expression that defines a function. Students close the unit by applying their insights about functions to model real-world situations and solve problems. **Profile of a Graduate Capacities:** Idea Generation
Unit 5 *Introduction to Exponential Functions*	In this unit, students are introduced to exponential relationships. Students learn that exponential relationships are characterized by a constant quotient over equal intervals, and compare it to linear relationships which are characterized by a constant difference over equal intervals. They encounter contexts that change exponentially. These contexts are presented verbally and with tables and graphs. They construct equations and use them to model situations and solve problems. Students investigate these exponential relationships without using function notation and language so that they can focus on gaining an appreciation for critical properties and characteristics of exponential relationships.

	Students subsequently view these new types of relationships as functions and employ the notation and terminology of functions (for example, dependent and independent variables). They study graphs of exponential functions both in terms of contexts they represent and abstract functions that don't represent a particular context, observing the effect of different values of a and b on the graph of the function represented by $f(x)=ab^x$. In this unit, students learn that the output of an increasing exponential function is eventually greater than the output of an increasing linear function for the same input. **Profile of a Graduate Capacities:** Analyzing
Unit 6 *Quadratic Functions*	This unit begins with students contrasting quadratic growth with linear and exponential growth. They further observe that eventually these quadratic patterns grow more quickly than linear patterns but more slowly than exponential patterns. Students examine the important example of free-falling objects whose height over time can be modeled with quadratic functions. They use tables, graphs, and equations to describe the movement of these objects, eventually looking at the situation where a projectile is launched upward. Through this investigation, students also begin to appreciate how the different coefficients in a quadratic function influence the shape of the graph. In addition to projectile motion, students examine other situations represented by quadratic functions including area and revenue. Next, students examine the standard and factored forms of quadratic expressions. They investigate how each form is useful for understanding the graph of the function defined by these equivalent forms. Finally, students investigate the vertex form of a quadratic function and understand how the parameters in the vertex form influence the graph. They learn how to determine the vertex of the graph from the vertex form of the function. They also begin to relate the different parameters in the vertex form to the general ideas of horizontal and vertical translation and vertical stretch, ideas which will be investigated further in a later course. **Profile of a Graduate Capacities:** Analyzing
Unit 7 *Quadratic Equations*	In this unit, students interpret, write, and solve quadratic equations. They see that writing and solving quadratic equations enables them to find input values that produce certain output values. Students begin solving quadratic equations by reasoning. Next, students learn that equations of the form (x - m)(x - n) = 0 can be easily solved by applying the zero product property, which says that when two factors have a product of 0, one of the factors must be 0. When the equations are not in factored form, students rearrange them so that one side is 0, and rewrite the expressions from standard form to factored form. Students soon recognize that not all quadratic expressions in standard form can be rewritten into factored form. Even when it is possible, finding the right two numbers may be tedious, so another strategy is needed. Students encounter perfect squares and notice that solving a quadratic equation is pretty straightforward when the equation contains a perfect square on one side and a number on the other. They learn that we can put equations into this helpful format by completing

the square, that is, by rewriting the equation such that one side is a perfect square. Although this method can be used to solve any quadratic equation, it is not practical for solving all equations. This challenge motivates the quadratic formula.

Once introduced to the formula, students apply it to solve contextual and abstract problems, including those that they couldn't previously solve. After gaining some experience using the formula, students investigate how it is derived. They find that the formula essentially encapsulates all the steps of completing the square into a single expression. Just like completing the square, the quadratic formula can be used to solve any equation, but it may not always be the quickest method. Students consider how to use the different methods strategically.

Throughout the unit, students see that solutions to quadratic equations are often irrational numbers. Students reason about whether such sums and products are rational or irrational.

Toward the end of the unit, students revisit the vertex form and recall that it can be used to identify the maximum or minimum of a quadratic function. Previously students learned to rewrite expressions from vertex form to standard form. Now they can go in reverse—by completing the square. Being able to rewrite expressions in vertex form allows students to effectively solve problems about maximum and minimum values of quadratic functions.

In the final lesson, students integrate their insights and choose appropriate strategies to solve an applied problem and a mathematical problem (a system of linear and quadratic equations).

Profile of a Graduate Capacities: Analyzing

Grade 6 P.E. Curriculum Overview   2024-2025

Unit 1 *My Active Lifestyle (Personal Fitness)*	In this unit, students will learn fitness's health and skill components, ultimately leading to the CT State Fitness Test. Students will experience the state fitness test and the fundamentals of fitness, such as balance, speed, coordination, agility, and power. Students will examine fitness data, set goals, and consider strategies to meet these goals, and reflect on their progress. Ultimately, students will identify activities they enjoy and can pursue outside of PE class. **Profile of a Graduate Capacities:** Self-Awareness
Unit 2 *Cooperation and Team Building*	The emphasis of this unit is cooperation, teamwork, and decision-making. Students will participate in games and activities to help them understand the skills associated with being cooperative in groups, on the ropes course, and in activities such as pickleball, badminton, and other group games. Students will be expected to demonstrate an appreciation for self, others, and equipment during this unit. Students will make decisions to safely, responsibly, and respectfully navigate the variety of situations that they will encounter in group games and the ropes course. Ultimately, they will apply these decision-making and teamwork abilities to analyze a new ropes course feature and create a plan to successfully conquer it as a team. **Profile of a Graduate Capacities:** Decision Making
Unit 3 *Responsible Personal and Social Behavior*	Throughout this unit, students will be engaging in a variety of games and activities that can be played indoors during the winter months when outdoor activities are limited. As such, space will often be shared between different classes and there will be a great deal of large group activities. This will require students to be able to self-monitor and regulate as well as be mindful of safety concerns. At the start of the unit, all students will be introduced to the personal and social expectations for this unit. Students will continually adhere to the expectations for responsible personal and social behavior as they engage in activities such as basketball, newcomb, four-square, nitro ball, Football Frenzy, Catch 15, Ultimate Ball, and other skill-based, collaborative games and activities. **Profile of a Graduate Capacities:** Collective Intelligence
Unit 4 *Spartan Challenge*	Students will build on their unit in teamwork and cooperation as they navigate various group games and activities. They will be expected to practice and employ their teamwork skills as they work to develop physical skills such as running, jumping, throwing, and general fitness movements. Ultimately, students will participate in a large group cooperative team fitness challenge. During this event, students will employ not only teamwork skills but the physical skills they have practiced through the unit as they work to conquer the obstacle challenges set forth. Emphasis will be placed on groups collaboratively determining roles to accomplish the tasks. **Profile of a Graduate Capacities:** Idea Generation
Unit 5 *Invasion Games*	During this unit, students will participate in individual and group activities that involve spatial awareness and invading space. Teamwork and sportsmanship are emphasized and integrity is key to successful activities. Students will apply the teamwork skills they have learned about all year to strategic gameplay. Students will be expected to analyze game situations and plan strategies and tactics to help them succeed. Ultimately, students will be assessed as they engage in game-play and demonstrate how they operate

	successfully as a team working respectfully and responsibly with others, exchanging and evaluating ideas to achieve a common objective. Emphasis will be on cardiorespiratory games, integrity in strategic plans, and roles for everybody. **Profile of a Graduate Capacities:** Analyzing, Collective Intelligence

Grade 7 P.E. Curriculum Overview   2024-2025

Unit 1 *Strategies and Tactics*	In this unit, students will explore the strategies and tactics needed to be successful in team or individual games. Students will learn tactics such as field positioning, route running, one v. one/2 v 2 offense and defense, and spatial and body positioning. Safety considerations regarding movement performance. Working with others, role/position assignment, change of direction and speed, etc. Identifying passing and shooting lanes. **Profile of a Graduate Capacities:** Decision Making
Unit 2 *Cultural Games*	In this unit, students will experience a variety of games from different cultures. While participating, students will learn the origin of these games and discover how/why these games were developed and adapted for our Physical Education class. Students will be able to present a cultural game of their choosing to the class. They will also be given the opportunity to adapt these games/dances to fit into a Physical Education class. This will include the origin of the game, how and why it was created, and how the student has safely adapted it to fit into a physical education class. **Profile of a Graduate Capacities:** Alternate Perspectives
Unit 3 *Responsible Personal and Social Behavior*	Throughout this unit, students will be engaging in a variety of games and activities that can be played indoors during the winter months when outdoor activities are limited. As such, space will often be shared between different classes and there will be a great deal of large group activities. This will require students to regularly self monitor as well as be mindful of safety concerns. At the start of the unit, all students will continue to demonstrate the personal and social expectations and build upon those interpersonal skills. They will be given choices of activities during this unit that are both skill building and team building. Students will regularly refer to the poster for Standards 4, 5 and Collective Intelligence. **Profile of a Graduate Capacities:** Collective Intelligence
Unit 4 *Track and Field*	In this unit students will use skills associated with track and field, such as running, jumping, and throwing. Students will explore the techniques for each activity and be allowed to practice and refine these skills. Students will be able to compare scores in their three favorite events to the current Daniel Hand records in the corresponding event. Students will then design and analyze a plan that would allow them to improve their personal best. **Profile of a Graduate Capacities:** Analyzing
Unit 5 *Lifetime Pursuits*	In this unit students will explore a variety of popular lifetime activities. Students will begin with refining their skills in striking with long and short implements, progressing into tournament play. There will be a focus on sportsmanship, etiquette, and rule following. Students will understand that they now possess the skills and knowledge to participate in any of these activities for the remainder of their lives. Students will also explore a variety of backyard games, focusing on rules and game play. This will give students the confidence to participate in any of these games in a relaxed setting during their lives. **Profile of a Graduate Capacities:** Decision Making

Grade 8 P.E. Curriculum Overview   2024-2025

Unit 1 *Personal Fitness*	In this unit, students will learn fitness's health and skill components, ultimately leading to the CT State Fitness Test. Students will experience the state fitness test and the fundamentals of fitness, such as balance, speed, coordination, agility, and power. Students will examine fitness data, set goals, and consider strategies to meet these goals and reflect on their progress. Students will participate in activities that utilize the low-ropes course and indoor training equipment. Students will be instructed on the proper use of all equipment on which they will train. Ultimately, students will apply their understanding of fitness data and methods to attain fitness goals as they analyze a fictional client's fitness goals and develop a plan for them. **Profile of a Graduate Capacities:** Analyzing, Self-Awareness
Unit 2 *Responsible Personal and Social Behavior*	Throughout this unit, students will be engaging in a variety of games and activities that can be played indoors during the winter months when outdoor activities are limited. As such, space will often be shared between different classes and there will be a great deal of large group activities. This will require students to be able to self-monitor and regulate as well as be well-versed in safety concerns. At the start of the unit, all students will review the personal and social expectations for this unit. Students will demonstrate proficiency for responsible personal and social behavior as they engage in activities such as Speedball, Indoor Soccer, Team Handball, Floorball, and Competitive and Recreational Tournament Play. **Profile of a Graduate Capacities:** Collective Intelligence
Unit 3 *Outdoor Adventure*	The goal of this unit is twofold. One is to provide students the opportunity to build teamwork skills, and utilize those to complete team challenges. The second is to provide students the opportunity to gain an appreciation of various outdoor lifetime activities that differ from mainstream sports. These activities will take place in a variety of locales: in the gym, low ropes course, Bauer Park, hiking trails as well as outdoor field space. The main thing is to get outside and take a break from sports and fitness testing, it's to develop a lifelong appreciation and understanding of how you can have healthy outdoor pursuits. **Profile of a Graduate Capacities:** Decision Making
Unit 4 *Lifetime Fitness*	In this unit, students will recognize the value of physical activity, for health, enjoyment, challenge, self-expression, and social interaction. This will be taught through cooperative and recreational games where students will be expected to display responsible and personal social behavior. Students will be taught and expected to apply knowledge of concepts, principles, strategies, and tactics related to movement and performance. Emphasis will be placed on learning what activities students enjoy and that can be played with a wide variety of people for a lifetime. Students will monitor their level of physical activity by checking their heart rate and number of steps so that they learn that enjoyable, relaxing experiences can also benefit their physical health as well as their mental and social well-being. **Profile of a Graduate Capacities:** Product Creation

Leisure P.E. Curriculum Overview   2024-2025

Unit 1 *Lawn Games*	Students will be introduced to the theme of this course which is focused on developing skills to participate in a variety of leisure activities that can be pursued throughout a lifetime to support physical, emotional, and social well-being. Students will learn activity-specific movements, rules, and etiquette for a variety of games and activities to make them comfortable joining in or proposing an activity. Emphasis will be placed on the importance of lifelong physical activity and opportunities to be social, both of which contribute to mental and emotional health. During this unit, students will engage in a variety of activities that can be done in a backyard or open space such as a field. The activities include but are not limited to frisbee games, golf, and small-sided cooperative precision games. Connecticut State Fitness Testing will take place during this unit. **Profile of a Graduate Capacities:** Product Creation
Unit 2 *Styles of Dance*	During this unit, students will explore different forms of dance that can be done not only as an individual but also with a partner or in small groups. Students will learn about rhythm and tempo and how to work cooperatively with a partner or group of people to enjoy all the benefits that dance has to offer. Students will participate in, but not limited to, various dances such as multicultural dance, line dance, swing dance and create a dance. **Profile of a Graduate Capacities:** Collective Intelligence
Unit 3 *Group Fitness*	During this unit, students will engage in HIIT cardio, dance fitness (zumba), muscular endurance circuit training using a variety of fitness equipment, and mobility activities like yoga and pilates. Students will engage in group fitness routines that focus on one or more of the health-related components of fitness (Flexibility, cardiorespiratory endurance, muscular endurance, and muscular strength). **Profile of a Graduate Capacities:** Collective Intelligence, Product Creation
Unit 4 *Alternative Activities*	During this unit, students will engage in non-traditional physical activities that promote an active and healthy lifestyle. Activities include (but are not limited to) bowling, meditation, Tai Chi, golf, and hiking. Learning tasks during this unit are low-intensity and allow students to practice mindfulness through movement. Lesson activities will consist of games, activities, and challenges that support student collaboration and cooperation to find success. The games in this unit are popular among many communities and are accessible through clubs, social media groups, and friends. Having the background knowledge and skills to be able to participate in these activities down barriers that could possibly stop students from enjoying these games in the future. **Profile of a Graduate Capacities:**

Lifetime Pursuits Curriculum Overview

2024-2025

Unit 1 *Community-Based Activities*	Oftentimes, there are adult leagues or clubs in the community that promote health and fitness through a specific activity or sport. Students will engage in team activities that they could theoretically continue to engage in as an adult in their community in order to maintain a health-enhancing level of physical fitness as well as social-emotional well-being throughout their lifespan. **Profile of a Graduate Capacities:** Product Creation	
Unit 2 *Components of Fitness*	Throughout this unit, students will participate in activities that emphasize the components of fitness. Students will participate in activities that promote cardiorespiratory endurance through a combination of steady-state cardio and HIIT cardio. Participants will engage in muscular endurance tasks using weights, resistance bands, and their own body weight. Flexibility activities include yoga and pilates, and muscular strength activities include free-weight resistance activities that target all major muscle groups in the body. Oftentimes, there are adult groups, leagues, or clubs in the community that promote health and fitness through a specific activity or sport. Students will engage in team/group activities that they could theoretically continue to engage in as adults in their community to maintain a health-enhancing level of physical fitness as well as social-emotional well-being for their lifespan. **Profile of a Graduate Capacities:** Design	
Unit 3 *Mindfulness Through Movement*	Students will be taught how to bring their full attention to the present moment to experience the "here and now" while experiencing stress reduction through a variety of low-intensity activities including but not limited to hiking, walking, meditative practices like Tai Chi, and stress-relieving recreational activities like bowling. Students will learn breathing techniques to promote relaxation and a sense of well-being. **Profile of a Graduate Capacities:** Idea Generation	
Unit 4 *Recreational Dance*	During this unit, students will explore different forms of dance that can be done in different recreational settings such as a school dance, wedding or any other social gathering. The different styles of dance that students will participate in include (but are not limited to) swing dance, salsa, mambo, hip hop, and create-a-dance. **Profile of a Graduate Capacities:** Collective Intelligence, Design	

Grade 7 Spanish Curriculum Overview   2024-2025

Unit 1 *¿Quién soy yo?*	In unit one of seventh grade, students will explain their likes and dislikes about activities, compare and contrast these things with their classmates, connect their personality traits with the activities they like to do, as they share who they are with their peers. At the culmination, students will share their likes and dislikes using personality adjectives in an audio recording. In the end, students will continue to explore likes, dislikes, and personalities through the cultural content of El Ekeko book. **Profile of a Graduate Capacities:** Product Creation
Unit 2 *Cuerpo Sano, Mente Sana (Healthy Body, Healthy Mind)*	In this second unit of seventh grade, students will be introduced to a variety of foods presented in different courses. Using this information, students will be able to express their likes and dislikes about a variety of foods, drinks, and activities in the target language. Students will be able to give advice about activities and eating habits that reflect a healthy lifestyle. They will later reflect on what it means to be a healthy adolescent by designing their own infographic offering tips to their Polson classmates. **Profile of a Graduate Capacities:** Product Creation
Unit 3 *Places in Town*	In this third unit of seventh grade, students will learn about specific places in town where they can visit, and explore the activities they can do there. At the culmination of the unit, students will make connections with their vocabulary (new learning and past knowledge) to talk about what specific family members and themselves do in those different places around town. Students will create a four-day schedule of events to support their understanding of these new concepts. **Profile of a Graduate Capacities:** Product Creation
Unit 4 *Noches Misteriosas en Granada*	In this last unit of seventh grade, students will read a novel titled, Noches Misteriosas en Granada, about a boy who studies abroad in Granada, Spain. Students will first learn about the various cultural impacts of this region, and how they continue to support its lifestyle. The book highlights a legend where students will use this information to gain alternate perspectives from their peers in their performance based assessment. **Profile of a Graduate Capacities:** Alternate Perspectives

Grade 8 French Curriculum Overview   2024-2025

Unit 1 *Qui suis-je? Who am I?*	Let's discover more about you and what makes you who you really are! Our personalities and identities depend a lot on the people and places around us! In this unit, we will share how we are similar and different from our family members and friends. We'll make connections between our actions, belongings, hobbies, and so much more. All of this is in preparation for a trip abroad! In our PBA, students will be preparing for an imaginary summer abroad in a francophone city! The trip includes 4 weeks living with a French-speaking host family. The program requires participants to prepare an introduction of some sort so that they can place students with a family who matches their personality, likes/dislikes, interests, etc. This introduction will also be shared with host families so they can get to know students before their arrival. **Profile of a Graduate Capacities:** Product Creation, Self-Awareness
Unit 2 *Allons au marche! (Let's go to the market!)*	Allons au marché! pushes students to step out of their comfort zone and into the complicated, fascinating, ever-changing world of marketplaces and meals! So much can be learned about a different culture by examining their food-related habits and customs. Students will build up their knowledge of food and drinks as they tackle sophisticated concepts such as the partitif. All our class discussions and activities will culminate in a marketplace, where students will test their skills at understanding requests, finding the right market, and negotiating their purchases. **Profile of a Graduate Capacities:** Analyzing, Collective Intelligence
Unit 3 *Très à la mode!*	How you dress tells a lot about who you are, what you like to do, and where you live. Students will discuss what clothing they wear and why, and what that reflects about them (e.g. Are they athletic? artistic? crafty? etc!). They will compare that to what teens are wearing around the francophone world. As they dig deeper into the purpose/meaning of different articles of clothing, they will explore the cultural differences in how to give and accept compliments. Throughout the unit students will expand their knowledge of verb conjugations both in the past and present and grammatical concepts such as direct object pronouns. **Profile of a Graduate Capacities:** Product Creation
Unit 4 *"Qu'est-ce qui s'est passé?!" (What happened?!)*	"Qu'est-ce qui s'est passé?!" (What happened?!) Throughout the span of this unit, students will delve into the world of the past tense [le passé composé]. As they advance their French skills, students will reflect on how they can improve their French through exposure to texts like song, film, and poetry. Students will examine and discuss stories, poems, videos, and films, as well as their own lives, which serve as meaningful context for the passé composé. The PBA will bring students into their 21st century world, giving them another opportunity to improve their French through something they do everyday, text messaging. Students will engage in a French texting task with a classmate as they chat about plans before and after they occur. **Profile of a Graduate Capacities:** Collective Intelligence