Connecticut Mathematics Model Curriculum Alignment

Resource Name: Imagine Learning Illustrative Mathematics Grade 8

Model Unit Name	Model Unit Standards	Resource Unit(s) Number and Lessons	Standard Frequency
This is the title of the unit in the model curricula	*These are the standards addressed in the unit*	*This is the unit(s) that aligns with the model unit from the resource*	*This is the total number of lessons the standard is addressed*
Pacing - Illustrative Mathematics 6-8 lessons are designed to fit within a 45-50 minute block. Pacing guidance for each activity is provided in the lesson plans.			
Real Numbers			
	8.NS.A.1	Unit 8, Lesson 14: Decimal Representations of Rational Numbers	2 Days - 2 Spotlight Lessons
		Unit 8, Lesson 15: Infinite Decimal Expansions	

	8.NS.A.2	Unit 8, Lesson 1: The Areas of Squares and Their Side Lengths	5 Days - 5 Spotlight Lessons
		Unit 8, Lesson 4: Square Roots on the Number Line	
	8.EE.A.1	Unit 7, Lesson 1: Exponent Review	

		Unit 7, Lesson 2: Multiplying Powers of Ten	10 Days - 10 Spotlight Lessons
	8.EE.A.2	Unit 8, Lesson 5: Reasoning About Square Roots	7 Days - 7 Spotlight Lessons
		Unit 8, Lesson 13: Cube Roots	

	8.EE.A.3	Unit 7, Lesson 9: Describing Large and Small Numbers Using Powers of 10	6 Days - 6 Spotlight Lessons
		Unit 7, Lesson 10: Representing Large Numbers on the Number Line	
	8.EE.A.4	Unit 7, Lesson 11: Representing Small Numbers on the Number Line	7 Days - 7 Spotlight Lessons
		Unit 7, Lesson 14: Multiplying, Dividing, and Estimating with Scientific Notation	
Pythagorean Theorem			
	8.EE.A.2	Unit 8, Lesson 10: Applications of the Pythagorean Theorem	7 Days - 7 Spotlight Lessons
		Unit 8, Lesson 3: Rational and Irrational Numbers	

	8.G.B.6	Unit 8, Lesson 7: A Proof of the Pythagorean Theorem	2 Days - 2 Spotlight Lessons
		Unit 8, Lesson 9: The Converse	
	8.G.B.7	Unit 8, Lesson 8: Finding Unknown Side Lengths	5 Days - 5 Spotlight Lessons
		Unit 8, Lesson 16: When Is the Same Size Not the Same Size?	
	8.G.B.8	Unit 8, Lesson 11: Finding Distances in the Coordinate Plane	1 Day - 1 Spotlight Lesson
		8.8.11 Spotlight Lesson: Finding Distances in the Coordinate Plane	
Congruence and Similarity			
	8.G.A.1	Unit 1, Lesson 1: Moving in the Plane	13 Days - 13 Spotlight Lessons

		Unit 1, Lesson 6: Describing Transformations	
	8.G.A.2	Unit 1, Lesson 11: What Is the Same?	6 Days - 6 Spotlight Lessons
		Unit 1, Lesson 12: Congruent Polygons	

	8.G.A.3	Unit 1, Lesson 5: Coordinate Moves	6 Days - 6 Spotlight Lessons
		Unit 1, Lesson 6: Describing Transformations	
	8.G.A.4	Unit 2, Lesson 6: Similarity	3 Days - 3 Spotlight Lessons

		Unit 2, Lesson 9: Side Length Quotients in Similar Triangles	
	8.G.A.5	Unit 1, Lesson 14: Alternate Interior Angles	6 Days - 5 Spotlight Lessons
		Unit 1, Lesson 15: Adding the Angles in a Triangle	
Linear Relationships			
	8.EE.B.5	Unit 3, Lesson 2: Graphs of Proportional Relationships	4 Days - 4 Spotlight Lessons
		Unit 3, Lesson 6: More Linear Relationships	
	8.EE.B.6	Unit 2, Lesson 10: Meet Slope	7 Days- 7 Spotlight Lessons
		Unit 3, Lesson 10: Calculating Slope	

	8.EE.C.7	Unit 4, Lesson 5: Solving Any Linear Equation Unit 4, Lesson 4: More Balanced Moves	8 Days - 8 Spotlight Lessons
	8.F.A.1	Unit 5, Lesson 1: Inputs and Outputs Unit 5, Lesson 3: Equations for Functions	7 Days - 6 Spotlight Lessons
	8.F.A.2	Unit 5, Lesson 7: Connecting Representations of Functions Unit 5, Lesson 8: Linear Functions	2 Days - 2 Spotlight Lessons
	8.F.A.3	Unit 5, Lesson 4: Tables, Equations, and Graphs of Functions Unit 5, Lesson 18: Scaling Two Dimensions	4 Days - 4 Spotlight Lessons

	8.F.B.4	Unit 5, Lesson 9: Linear Models	

		Unit 5, Lesson 10: Piecewise Linear Functions	4 Days - 4 Spotlight Lessons
	8.F.B.5	Unit 5, Lesson 5: More Graphs of Functions	3 Days - 3 Spotlight Lessons
		Unit 5, Lesson 6: Even More Graphs of Functions	
System of Linear Relationships			
	8.EE.C.7	Unit 4, Lesson 1: Number Puzzles	8 Days - 8 Spotlight Lessons
		Unit 4, Lesson 3: Balanced Moves	

	8.EE.C.8	Unit 4, Lesson 9: When Are They the Same?	10 Days - 10 Spotlight Lessons
		Unit 5, Lesson 10: On or Off the Line?	
	8.F.A.2	Unit 5, Lesson 7: Connecting Representations of Functions	2 Days - 2 Spotlight Lessons
		Unit 5, Lesson 8: Linear Functions	

	8.F.B.4	Unit 5, Lesson 11: Filling Containers	4 Days - 4 Spotlight Lessons
		8.5.9 Spotlight Lesson: Linear Models	
Volume			

	8.G.C.9	Unit 5, Lesson 13: The Volume of a Cylinder	10 Days - 10 Spotlight Lessons
		Unit 5, Lesson 15: The Volume of a Cone	
Patterns in Data			
	8.SP.A.1	Unit 6, Lesson 1: Organizing Data	8 Days - 8 Spotlight Lessons
		Unit 6, Lesson 2: Plotting Data	
	8.SP.A.2	Unit 6, Lesson 4: Fitting a Line to Data	4 Days - 4 Spotlight Lessons
		Unit 6, Lesson 5: Describing Trends in Scatter Plots	

	8.SP.A.3	Unit 6, Lesson 3: What a Point in a Scatter Plot Means? Unit 6, Lesson 6: The Slope of a Fitted Line	3 Days - 3 Spotlight Lessons

	8.SP.A.4	Unit 6, Lesson 9: Looking for Associations Unit 6, Lesson 10: Using Data Displays to Find Associations	2 Days - 2 Spotlight Lessons

Scope and Sequence

If a district uses this resource to implement the state model curriculum for grade 6, the following scope and sequence should be followed to ensure alignment and attention to the progressions of mathematics.

Unit Number/Title	Lesson Title	Lesson Objectives	# of Days/Weeks (assume 1 hour of instruction)

Unit 1: Rigid Transformations and Congruence			20 Days of Instruction -- 4 Weeks
	Rigid Transformations		
	Lesson 1	Describe (orally and in writing) a translation or rotation of a shape using informal language, e.g., “slide,” “turn left,” etc.	
		Identify angles and rays that do not belong in a group and justify (orally) why the object does not belong.	
	Lesson 2	Describe (orally and in writing) the movement of shapes informally and formally using the terms “clockwise,” “counterclockwise,” “translations,” “rotations,” and “reflections” of figures.	

	Lesson 3	Describe (orally) the moves needed to perform a transformation.	
		Draw and label the image and “corresponding points” of figures that result from translations, rotations, and reflections.	
		Draw the “image” of a figure that results from a translation, rotation, and reflection in square and isometric grids and justify (orally) that the image is a transformation of the original figure.	

	Lesson 4	Comprehend that a “transformation” is a translation, rotation, reflection, or a combination of these.	
		Draw a transformation of a figure using information given orally.	
		Explain (orally) the “sequence of transformations” that “takes” one figure to its image.	
		Identify (orally and in writing) the features that determine a translation, rotation, or reflection.	
	Lesson 5	Draw and label a diagram of a line segment rotated 90 degrees clockwise or counterclockwise about a given center.	
		Generalize (orally and in writing) the process to reflect any point in the coordinate plane.	
		Identify (orally and in writing) coordinates that represent a transformation of one figure to another.	
	Lesson 6	Create a drawing on a coordinate grid of a transformed object using verbal descriptions.	

		Identify what information is needed to transform a polygon. Ask questions to elicit that information.	
	Properties of Rigid Transformations		
	Lesson 7	Comprehend that the phrase “rigid transformation” refers to a transformation where all pairs of “corresponding distances” and “corresponding angle” measures in the figure and its image are the same.	
		Draw and label a diagram of the image of a polygon under a rigid transformation, including calculating side lengths and angle measures.	
		Identify (orally and in writing) a sequence of rigid transformations using a drawing of a figure and its image.	
	Lesson 8	Draw and label rotations of 180 degrees of a line segment from centers of the midpoint, a point on the segment, and a point not on the segment.	
		Generalize (orally and in writing) the outcome when rotating a line segment 180 degrees.	
		Identify(orally and in writing) the rigid transformations that can build a diagram from one starting figure.	
	Lesson 9	Comprehend that a rotation by 180 degrees about a point of two intersecting lines moves each angle to the angle that is vertical to it.	

		Describe (orally and in writing) observations of lines and parallel lines under rigid transformations, including lines that are taken to lines and parallel lines that are taken to parallel lines.	

		Draw and label rigid transformations of a line and explain the relationship between a line and its image under the transformation.	
		Generalize (orally) that "vertical angles" are congruent using informal arguments about 180 degree rotations of lines.	
	Lesson 10	Draw and label images of triangles under rigid transformations and then describe (orally and in writing) properties of the composite figure created by the images.	
		Generalize that lengths and angle measures are preserved under any rigid transformation.	
		Identify side lengths and angles that have equivalent measurements in composite shapes and explain (orally and in writing) why they are equivalent.	
	Congruence		
	Lesson 11	Compare and contrast (orally and in writing) side lengths, angle measures, and areas using rigid transformations to explain why a shape is or is not congruent to another.	

		Comprehend that congruent figures have equal corresponding side lengths, angle measures, and areas.	
		Describe (orally and in writing) two figures that can be moved to one another using a sequence of rigid transformations as “congruent.”	

	Lesson 12	Comprehend that figures with the same area and perimeter may or may not be congruent.	
		Critique arguments (orally) that two figures with congruent corresponding sides may be non-congruent figures.	
		Justify (orally and in writing) that two polygons on a grid are congruent using the definition of congruence in terms of transformations.	
	Lesson 13	Determine whether shapes are congruent by measuring corresponding points.	
		Draw and label corresponding points on congruent figures.	
		Justify (orally and in writing) that congruent figures have equal corresponding distances between pairs of points.	
	Angles in a Triangle		

	Lesson 14	Calculate angle measures using alternate interior, adjacent, vertical, and supplementary angles to solve problems.	
		Justify (orally and in writing) that “alternate interior angles” made by a “transversal” connecting two parallel lines are congruent using properties of rigid motions.	
	Lesson 15	Comprehend that a straight angle can be decomposed into 3 angles to construct a triangle.	

		Justify (orally and in writing) that the sum of angles in a triangle is 180 degrees using properties of rigid motions.	
	Lesson 16 (Optional)	Create diagrams using 180-degree rotations of triangles to justify (orally and in writing) that the measure of angles in a triangle sum up to 180 degrees.	
		Generalize the Triangle Sum Theorem using rigid transformations or the congruence of alternate interior angles of parallel lines cut by a transversal.	
	Let’s Put it to Work		

	Lesson 17	Create tessellations and designs with rotational symmetry using rigid transformations.	
		Explain (orally and in writing) the rigid transformations needed to move a tessellation or design with rotational symmetry onto itself.	
Unit 2: Dilations, Similarity, and Introducing Slope			**15 Days of Instruction -- 3 Weeks**
	Dilations		
	Lesson 1	Comprehend the term "dilation" as a process that produces scaled copies.	
		Describe (orally) features of scaled copies of a rectangle.	
		Identify rectangles that are scaled copies of one another.	

	Lesson 2	Comprehend that "a point on the circle" (in written and spoken language) refers to a point that lies on the edge of the circle and not in the circle's interior.	

		Create dilations of polygons using a circular grid given a scale factor and center of dilation.	
		Explain (orally) how a dilation affects the size, side lengths and angles of polygons.	
	Lesson 3	Create a dilation of a figure given a scale factor and center of dilation.	
		Explain (orally) the effect of the scale factor on the size of the image of a polygon and its distance from the center of dilation.	
		Identify the center, scale factor, and image of a dilation without a circular grid.	
	Lesson 4	Create a dilation of a polygon on a square grid given a scale factor and center of dilation.	
		Identify the image of a figure on a coordinate grid given a scale factor and center of dilation.	
	Lesson 5	Describe (orally) a figure on a coordinate grid and its image under a dilation, using coordinates to refer to points.	
		Describe (orally) several dilations of one figure with the same center but different scale factors.	

		Identify what information is needed to dilate a polygon on a coordinate grid. Ask questions to elicit that information.	
	Similarity		
	Lesson 6	Comprehend that the phrase “similar figures” (in written and spoken language) means there is a sequence of translations, rotations, reflections, and dilations that takes one figure to the other.	
		Justify (orally) the similarity of two figures using a sequence of transformations that takes one figure to the other.	
	Lesson 7	Comprehend the phrase “similar polygons” (in written and spoken language) to mean the polygons have congruent corresponding angles and proportional side lengths.	
		Critique (orally) arguments that claim two polygons are similar.	
		Justify (orally) the similarity of two polygons given their angle measures and side lengths.	
	Lesson 8	Generalize a process for identifying similar triangles and justify (orally) that finding two pairs of congruent angles is sufficient to show similarity.	
		Justify (orally) that two triangles are similar by finding a sequence of transformations that takes one triangle to the other or checking that two pairs of corresponding angles are congruent.	

	Lesson 9	Calculate unknown side lengths in similar triangles using the ratios of side lengths within the triangles and the scale factor between similar triangles.	

		Generalize (orally) that the quotients of pairs of side lengths in similar triangles are equal.	
	Slope		
	Lesson 10	Comprehend the term “slope” to mean the quotient of the vertical distance and the horizontal distance between any two points on a line.	
		Draw a line on a coordinate grid given its slope and describe (orally) observations about lines with the same slope.	
		Justify (orally) that all “slope triangles” on one line are similar by using transformations or Angle-Angle Similarity.	
	Lesson 11	Create an equation relating the quotient of the vertical and horizontal side lengths of a slope triangle to the slope of a line.	
		Justify (orally) whether a point is on a line by finding quotients of horizontal and vertical distances.	
	Lesson 12	Create an equation of a line with positive slope on a coordinate grid using knowledge of similar triangles.	

		Generalize (orally) a process for dilating a slope triangle ABC on a coordinate plane with center of dilation A and scale factor s.	
		Justify (orally) that a point (x,y) is on a line by verifying that the values of x and y satisfy the equation of the line.	
	Let’s Put it to Work		

	Lesson 13	Calculate the unknown heights of objects by using proportional reasoning and explain (orally) the solution method.	
		Justify (orally) why the relationship between the height of objects and the length of their shadows cast by the sun is approximately proportional.	
Unit 3: Linear Relationships			**16 Days of Instruction -- 4 Weeks**
	Proportional Relationships		
	Lesson 1	Comprehend that for the equation of a proportional relationship given by y=kx, k represents the constant of proportionality.	

		Create graphs and equations of proportional relationships in context, including an appropriate scale.	
		Interpret diagrams or graphs of proportional relationships in context.	
	Lesson 2	Compare graphs that represent the same proportional relationship using differently scaled axes.	
		Create graphs representing the same proportional relationship using differently scaled axes, and identify which graph to use to answer specific questions.	
	Lesson 3	Create an equation and a graph to represent proportional relationships, including an appropriate scale and axes.	

		Determine what information is needed to create graphs that represent proportional relationships. Ask questions to elicit that information.	
	Lesson 4	Compare the rates of change for two proportional relationships, given multiple representations.	

		Interpret multiple representations of a proportional relationship in order to answer questions (in writing), and explain the solution method.	
		Present a comparison of two proportional relationships (using words and multiple other representations).	
	Representing Linear Relationships		
	Lesson 5	Compare and contrast (orally and in writing) proportional and nonproportional linear relationships.	
		Interpret (orally and in writing) features of the graph (i.e., slope and yintercept) of a non-proportional linear relationship.	
	Lesson 6	Describe (orally and in writing) how the slope and vertical intercept influence the graph of a line.	
		Identify and interpret the positive vertical intercept of the graph of a linear relationship.	
	Lesson 7	Create an equation that represents a linear relationship.	
		Generalize (orally and in writing) a method for calculating slope based on coordinates of two points.	

		Interpret the slope and y-intercept of the graph of a line in context.	

	Lesson 8	Coordinate (orally) features of the equation y=b+mx to the graph, including lines with a negative y-intercept.	
		Create and compare (orally and in writing) graphs that represent linear relationships with the same rate of change but different initial values.	
	Finding Slopes		
	Lesson 9	Create a graph of a line representing a linear relationship with a nonpositive rate of change.	
		Interpret the slope of a non-increasing line in context.	
	Lesson 10	Create a graph of a line using a verbal description of its features.	
		Describe (orally) the graph of a line using formal or informal language precisely enough to identify a unique line.	
		Generate a method to find slope values given two points on the line.	
	Lesson 11	Comprehend that for the graph of a vertical or horizontal line, one variable does not vary, while the other can take any value.	
		Create multiple representations of linear relationship, including a graph, equation, and table.	

		Generalize (in writing) that a set of points of the form (x,b) satisfy the equation y=b and that a set of points of the form (a,y) satisfy the equation x=a.	
	Linear Equations		
	Lesson 12	Comprehend that the points that lie on the graph of an equation represent exactly the solution set of the equation of the line (i.e., that every point on the line is a solution, and any point not on the line is not a solution).	
		Create a graph and an equation in the form Ax+By=C that represent a linear relationship.	
		Determine pairs of values that satisfy or do not satisfy a linear relationship using an equation or graph.	
	Lesson 13	Calculate the solution to a linear equation given one variable, and explain (orally) the solution method.	
		Determine whether a point is a solution to an equation of a line using a graph of the line.	
	Let's Put it to Work		
	Lesson 14	Describe (orally) limitations of a graphical representation of a situation based on real-world constraints on the quantities.	

		Interpret the graph of a linear equation in context, including slope, intercept, and solution, in contexts using multiple representations of non-proportional linear relationships.	

Unit 4: Linear Equations and Linear Systems			**18 Days of Instruction -- 4 Weeks**
	Puzzle Problems		
	Lesson 1	Calculate a missing value for a number puzzle that can be represented by a linear equation in one variable, and explain (orally and in writing) the solution method.	
		Create a number puzzle that can be represented by a linear equation in one variable.	
	Linear Equations in One Variable		
	Lesson 2	Calculate the weight of an unknown object using a hanger diagram, and explain (orally) the solution method.	

		Comprehend that adding and removing equal items from each side of a hanger diagram or multiplying and dividing items on each side of the hanger by the same amount are moves that keep the hanger balanced.	
	Lesson 3	Compare and contrast (orally and in writing) solution paths to solve an equation in one variable by performing the same operation on each side.	
		Correlate (orally and in writing) changes on hanger diagrams with moves that create equivalent equations.	
	Lesson 4	Calculate a value that is a solution for a linear equation in one variable, and compare and contrast (orally) solution strategies with others.	

		Critique (in writing) the reasoning of others in solving a linear equation in one variable.	
	Lesson 5	Calculate a value that is a solution to a linear equation in one variable, and explain (orally) the steps used to solve.	
		Create an expression to represent a number puzzle, and justify (orally) that it is equivalent to another expression.	

		Justify (orally) that each step used in solving a linear equation maintains equality.	
	Lesson 6	Categorize (orally and in writing) linear equations in one variable based on their structure, and solve equations from each category.	
		Describe (orally and in writing) features of linear equations that have one solution, no solution, or many solutions.	
		Describe (orally) strategies for solving linear equations in one variable with different features or structures.	
	Lesson 7	Compare and contrast (orally and in writing) equations that have no solutions or infinitely many solutions.	
		Create linear equations in one variable that have either no solutions or infinitely many solutions, using structure, and explain (orally) the solution method.	
	Lesson 8	Describe (orally) a linear equation as having "one solution", "no solutions", or "an infinite number of solutions", and solve equations in one variable with one solution.	
		Describe (orally) features of linear equations with one solution, no solution, or an infinite number of solutions.	

	Lesson 9	Create an equation in one variable to represent a situation in which two conditions are equal.	
		Interpret the solution of an equation in one variable in context.	
	Systems of Linear Equations		
	Lesson 10	Determine (in writing) a point that satisfies two relationships simultaneously, using tables or graphs.	
		Interpret (orally and in writing) points that lie on one, both, or neither line on a graph of two simultaneous equations in context.	
	Lesson 11	Create a graph that represents two linear relationships in context, and interpret (orally and in writing) the point of intersection.	
		Interpret a graph of two equivalent lines in context.	
	Lesson 12	Comprehend that solving a system of equations means finding values of the variables that makes both equations true at the same time.	
		Coordinate (orally and in writing) graphs of parallel lines and a system of equations that has no solutions.	
		Create a graph of two lines that represents a system of equations in context.	

	Lesson 13	Coordinate (orally) the solution of an equation with variables on each side to the solution of a system of two linear equations.	
		Create a graph of a system of equations, and identify (orally and in writing) the number of solutions of the system of equations.	
	Lesson 14	Calculate values that are a solution for a system of equations, and explain (orally) the solution method.	
		Generalize (orally) a process for solving systems of equations using substitution.	
		Justify (orally and in writing) that a particular system of equations has no solutions using the structure of the equations.	
	Lesson 15	Categorize (in writing) systems of equations, including systems with infinitely many or no solutions, and calculate the solution for a system using a variety of strategies.	
		Create a system of equations that represents a situation and interpret (orally and in writing) the solution in context.	
	Let’s Put it to Work		
	Lesson 16	Calculate the solution to a system of equations in context, and present (using words and other representations) the solution method.	

		Create a system of equations to solve a problem in context.	
		Critique (orally) peer solutions to a system of equations.	

Unit 5: Functions and Volume			**22 - 25 Days of Instruction -- 5 Weeks**
	Inputs and Outputs		
	Lesson 1	Describe (orally) how input-output diagrams represent rules.	
		Identify a rule that describes the relationship between input-output pairs and explain (orally) a strategy used for figuring out the rule.	
	Lesson 2	Comprehend the structure of a function as having one and only one output for each allowable input.	
		Describe (orally and in writing) a context using function language, e.g., “the [output] is a function of the [input]” or “the [output] depends on the [input]”.	

		Identify (orally) rules that produce exactly one output for each allowable input and rules that do not.	
	Representing and Interpreting Functions		
	Lesson 3	Calculate the output of a function for a given input using an equation in two variables, and interpret (orally and in writing) the output in context.	
		Create an equation that represents a function rule.	
		Determine (orally and in writing) the independent and dependent variables of a function, and explain (orally) the reasoning.	

	Lesson 4	Determine whether a graph represents a function, and explain (orally) the reasoning.	
		Identify the graph of an equation that represents a function, and explain (orally and in writing) the reasoning.	
		Interpret (orally and in writing) points on a graph, including a graph of a function and a graph that does not represent a function.	

	Lesson 5	Describe (orally and in writing) a graph of a function as “increasing” or “decreasing” over an interval, and explain (orally) the reasoning.	
		Interpret (orally and in writing) a graph of temperature as a function of time, using language such as “input” and “output”.	
	Lesson 6	Compare and contrast (orally) peers’ graphs that represent the same context.	
		Comprehend that graphs representing the same context can appear different, depending on the variables chosen.	
		Draw the graph of a function that represents a context, and explain (orally) which quantity is a function of which.	
	Lesson 7	Compare and contrast (orally) representations of functions, and describe (orally) the strengths and weaknesses of each type of representation.	
		Interpret multiple representations of functions, including graphs, tables, and equations, and explain (orally) how to find information in each type of representation.	

	Linear Functions and Rates of Change	

	Lesson 8	Comprehend that any linear function can be represented by an equation in the form y=mx+b, where m and b are rate of change and initial value of the function, respectively.	
		Coordinate (orally and in writing) the graph of a linear function and its rate of change and initial value.	
	Lesson 9	Compare and contrast (orally and in writing) different linear models of the same data, and determine (in writing) the range of values for which a given model is a good fit for the data.	
		Create a model of a non-linear data using a linear function, and justify (orally and in writing) whether the model is a good fit for the data.	
	Lesson 10	Calculate the different rates of change of a piecewise linear function using a graph, and interpret (orally and in writing) the rates of change in context.	
		Create a model of a non-linear function using a piecewise linear function, and describe (orally) the benefits of having more or less segments in the model.	
	Cylinders and Cones		
	Lesson 11	Create a graph of a function from collected data, and interpret (in writing) a point on the graph.	

		Draw a container for which the height of water as a function of volume would be represented as a piecewise linear function, and explain (orally) the reasoning.	
		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	Draw a cylinder and label its height and radius, describe (in writing) the shape of the "base" of the figure.	
		Estimate the volumes of various containers using different units of measure, and explain (orally) the reasoning.	
	Lesson 13	Calculate the volume of a cylinder, and compare and contrast (orally) the formula for volume of a cylinder with the formula for volume of a prism.	
		Explain (orally) how to find the volume of a cylinder using the area of the base and height of the cylinder.	
	Lesson 14	Calculate the value of one dimension of a cylinder, and explain (orally and in writing) the reasoning.	
		Create a table of dimensions of cylinders, and describe (orally) patterns that arise.	

	Lesson 15	Calculate the volume of a cone and cylinder given the height and radius, and explain (orally) the solution method.	

		Compare the volumes of a cone and a cylinder with the same base and height, and explain (orally and in writing) the relationship between the volumes.	
	Lesson 16	Calculate the value of one dimension of a cylinder, and explain (orally and in writing) the reasoning.	
		Compare volumes of a cone and cylinder in context, and justify (orally) which volume is a better value for a given price.	
		Create a table of dimensions of cylinders, and describe (orally) patterns that arise.	
	Dimensions and Spheres		
	Lesson 17	Create a graph and an equation to represent the function relationship between the volume of a cylinder and its height, and justify (orally) that the relationship is linear.	
		Interpret (in writing) a point on a graph representing the volume of a cone as a function of its height, and explain (orally) how changing one dimension affects the other.	

	Lesson 18	Compare and contrast (orally) graphs of linear and nonlinear functions.	
		Create an equation and a graph representing the volume of a cone as a function of its radius, and describe (orally and in writing) how a change in radius affects the volume.	

		Describe (orally and in writing) how changing the input of a certain nonlinear function affects the output.	
	Lesson 19	Calculate the volume of a cylinder and cone with the same radius and height, and justify (orally and in writing) that the volumes are an upper and lower bound for the volume of a hemisphere of the same radius.	
		Estimate the volume of a hemisphere using the formulas for volume of a cone and cylinder, and explain (orally) the estimation strategy.	
	Lesson 20	Calculate the volume of a sphere, cylinder, and cone which have a radius of r and height of 2r, and explain (orally) the relationship between their volumes.	
		Create an equation to represent the volume of a sphere as a function of its radius, and explain (orally and in writing) the reasoning.	
	Lesson 21	Calculate the value of the radius of a sphere with a given volume using the structure of the equation, and explain (orally) the solution method.	

		Determine what information is needed to solve a problem involving volumes of cones, cylinders, and spheres. Ask questions to elicit that information.	
	Let’s Put it to Work		
	Lesson 22	Describe (orally) how a change in the radius of a sphere affects the volume.	

		Interpret (orally and in writing) functions that represent the volume of a sphere, cone, and cylinder, using different representations.	
Unit 6: Associations in Data			**12 - 13 Days of Instruction -- 3 Weeks**
	Does This Predict That?		
	Lesson 1	Comprehend that a “scatter plot” represents data with two variables and does not represent a function.	
		Coordinate (orally and in writing) representations of data in scatter plots and tables.	

		Describe (orally and in writing) patterns in representations of data in scatter plots and tables, and use these representations to make predictions.	
	Lesson 2	Create a representation of single-variable data using a box plot, histogram, or dot plot, and compare and contrast (orally) these representations with a scatter plot.	
		Create a scatter plot from a table of data, and describe (orally and in writing) the trend of the data.	
		Create a table of collected data, and explain (orally) how to organize the data.	
	Associations in Numerical Data		

	Lesson 3	Coordinate (orally and in writing) data in a table and points on a scatter plot.	
		Describe (orally) the trend of the data, and use the trend to predict unknown values.	
		Interpret (orally and in writing) a point on a scatter plot in context.	

	Lesson 4	Compare and contrast (orally) values in a data set with predictions made using a given line.	
		Comprehend that a model of data, such as a line of fit, can be used to predict values that are not given in the data.	
		Identify (orally) obvious outliers on a scatter plot.	
	Lesson 5	Critique (orally and in writing) a given line of fit on a scatter plot, and draw a different linear model of the same data.	
		Draw a linear model to fit data in a scatter plot, and describe (in writing) features of a line that fits data well.	
	Lesson 6	Describe (orally and in writing) the relationship between two variables using a line fit to data on a scatter plot.	
		Interpret (orally and in writing) points on the scatter plot, including points that do and do not lie on a line fit to the data.	
		Interpret (orally and in writing) the slope of a line fit to data in context.	
	Lesson 7	Categorize data sets, and describe (orally) the properties used to create categories.	

		Describe (orally) features of data on scatter plots, including “linear” and “nonlinear association” and “clustering” using informal language.	
		Explain (orally) what might cause a nonlinear association or clustering of data points in context.	
	Lesson 8	Create a scatter plot and draw a line to fit bivariate data, and identify (orally and in writing) outliers that appear in the data.	
		Interpret (orally and in writing) features of a scatter plot with a line of fit, including outliers, slope of the line, and clustering.	
	Associations in Categorical Data		
	Lesson 9	Calculate relative frequencies, and describe (orally and in writing) associations between variables using a relative frequency table.	
		Coordinate (orally and in writing) two-way tables, bar graphs, and segmented bar graphs representing the same data.	
	Lesson 10	Create a two-way table and a segmented bar graph that represent relative frequencies, and interpret (orally) the frequencies in context.	
		Determine (in writing) whether categorical data has a positive, negative, or no association using a relative frequency table or segmented bar graph, and justify (orally) the reasoning.	

	Let's Put it to Work		
	Lesson 11	Compare and contrast (orally) representations of bivariate data, including scatter plots, two-way tables, segmented bar graphs, and relative frequency tables.	
		Describe (orally and in writing) associations in bivariate data using different representations of the same data.	
Unit 7: Exponents and Scientific Notation			**18 Days of Instruction -- 4 Weeks**
	Exponent Review		
	Lesson 1	Comprehend that repeated division by 2 is equivalent to repeated multiplication by one-half.	
		Create an expression that represents repeated multiplication, and explain (orally) how the structure of the expression helps compare quantities.	
	Exponent Rules		

	Lesson 2	Generalize a process for multiplying exponential expressions with the same base, and justify (orally and in writing) that $10^n \cdot 10^m = 10^{n+m}$.	
	Lesson 3	Generalize a process for finding a power raised to a power, and justify (orally and in writing) that $(10^n)^m = 10^{n \cdot m}$.	

	Lesson 4	Generalize a process for dividing powers of 10, and justify (orally and in writing) that $\frac{10^n}{10^m} = 10^{n-m}$	
		Use exponent rules to multiply and divide with 10^0, and justify (orally) that 10^0 is 1.	
	Lesson 5	Describe (orally and in writing) how exponent rules extend to expressions involving negative exponents.	
		Describe patterns in repeated multiplication and division with 10 and $\frac{1}{10}$, and justify (orally and in writing) that $10^{-n} = \frac{1}{10^n}$.	
	Lesson 6	Generalize exponent rules for nonzero bases, including bases other than 10.	
		Use exponent rules to identify (in writing) equivalent exponential expressions, and explain (orally) the reasoning.	

	Lesson 7	Identify (orally) misapplications of exponent rules to expressions with multiple bases (orally and in writing).	
		Use exponent rules to rewrite exponential equations involving negative exponents to have a single positive exponent, and explain (orally) the strategy.	
	Lesson 8	Generalize a process for multiplying expressions with different bases having the same exponent, and justify (orally and in writing) that $(ab)^n = a^n \cdot b^n$.	

	Scientific Notation		
	Lesson 9	Describe (orally and in writing) large and small numbers as multiples of powers of 10.	
		Interpret a diagram for base-ten units, and explain (orally) how the small squares, long rectangles, and large squares relate to each other.	
	Lesson 10	Compare large numbers using powers of 10, and explain (orally) the solution method.	
		Use number lines to represent (orally and in writing) large numbers as multiples of powers of 10.	

	Lesson 11	Coordinate (orally and in writing) decimals and multiples of powers of 10 representing the same small number.	
		Use number lines to represent (orally and in writing) small numbers as multiples of powers of 10 with negative exponents.	
	Lesson 12	Determine what information is needed to answer a question about large numbers, and explain (orally) how that information would help solve the problem.	
		Use exponent rules and powers of 10 to solve problems in context, and explain (orally) the steps used to organize thinking.	
	Lesson 13	Identify (in writing) numbers written in scientific notation, and describe (orally) the features of an expression in scientific notation.	

	Lesson 14	Generalize (orally and in writing) a process of multiplying and dividing numbers in scientific notation.	
		Use scientific notation and estimation to compare quantities and interpret (orally and in writing) results in context.	

	Lesson 15	Generalize (orally and in writing) a process of adding and subtracting numbers in scientific notation and interpret results in context.	
	Let's Put it to Work		
	Lesson 16	Use scientific notation to compare quantities in context, and describe (orally) how using scientific notation helps with making comparisons between very large and very small quantities.	
Unit 8: Pythagorean Theorem and Irrational Numbers			**18 Days of Instruction -- 4 Weeks**
	Side Lengths and Areas of Squares		
	Lesson 1	Calculate the area of a tilted square on a grid by using decomposition, and explain (orally) the solution method.	
		Estimate the side length of a square by comparing it to squares with known areas, and explain (orally) the reasoning.	

	Lesson 2	Comprehend the term “square root of ” a (in spoken language) and the notation √a (in written language) to mean the side length of a square whose area is a square units.	

		Create a table and graph that represents the relationship between side length and area of a square, and use the graph to estimate the side lengths of squares with non-integer side lengths.	
		Determine the exact side length of a square and express it (in writing) using square root notation.	
	Lesson 3	Comprehend the term “irrational number” (in spoken language) to mean a number that is not rational and that √2 is an example of an irrational number.	
		Comprehend the term “rational number” (in written and spoken language) to mean a fraction or its opposite.	
		Determine whether a given rational number is a solution to the equation $x^2=2$ and explain (orally) the reasoning.	
	Lesson 4	Calculate an approximate value of a square root to the nearest tenth, and represent the square root as a point on the number line.	

		Determine the exact length of a line segment on a coordinate grid and express the length (in writing) using square root notation.	
		Explain (orally) how to verify that a value is a close approximation of a square root.	
	Lesson 5	Comprehend that $-\sqrt{a}$ represents the opposite of $\sqrt{a}$.	

		Determine a solution to an equation of the form $x^2=a$ and represent the solution as a point on the number line.	
		Identify the two whole number values that a square root is between and explain (orally) the reasoning.	
	The Pythagorean Theorem		
	Lesson 6	Comprehend the term "Pythagorean Theorem" (in written and spoken language) as the equation $a^2+b^2=c^2$ where a and b are the lengths of the legs and c is the length of the hypotenuse of a right triangle.	
		Describe (orally) patterns in the relationships between the side lengths of triangles.	
		Determine the exact side lengths of a triangle in a coordinate grid and express them (in writing) using square root notation.	

	Lesson 7	Calculate an unknown side length of a right triangle using the Pythagorean Theorem, and explain (orally) the reasoning.	
		Explain (orally) an area-based algebraic proof of the Pythagorean Theorem.	
	Lesson 8	Calculate unknown side lengths of a right triangle by using the Pythagorean Theorem, and explain (orally) the solution method.	
		Label the “legs” and “hypotenuse” on a diagram of a right triangle.	

	Lesson 9	Determine whether a triangle with given side lengths is a right triangle using the converse of the Pythagorean Theorem.	
		Generalize (orally) that if the side lengths of a triangle satisfy the equation $a^2+b^2=c^2$ then the triangle must be a right triangle.	
		Justify (orally) that a triangle with side lengths 3, 4, and 5 must be a right triangle.	
	Lesson 10	Describe (orally) situations that use right triangles, and explain how the Pythagorean Theorem could help solve problems in those situations.	
		Use the Pythagorean Theorem to solve problems within a context, and explain (orally) how to organize the reasoning.	

	Lesson 11	Calculate the distance between two points in the coordinate plane by using the Pythagorean Theorem and explain (orally) the solution method.	
		Generalize (orally) a method for calculating the length of a line segment in the coordinate plane using the Pythagorean Theorem.	
	Side Lengths and Volumes of Cubes		
	Lesson 12	Comprehend the term “cube root of a” (in spoken language) and the notation $\sqrt[3]{a}$ (in written language) to mean the side length of a cube whose volume is a cubic units.	
		Coordinate representations of a cube root, including cube root notation, decimal representation, the side length of a cube of given volume, and a point on the number line.	

	Lesson 13	Determine the whole numbers that a cube root lies between, and explain (orally) the reasoning.	
		Generalize a process for approximating the value of a cube root, and justify (orally and in writing) that if $x^3=a$, then $x=\sqrt[3]{a}$.	
	Decimal Representation of Rational and Irrational Numbers		

	Lesson 14	Comprehend that a rational number is a fraction or its opposite, and that a rational number can be represented with a decimal expansion that “repeats” or “terminates”.	
		Represent rational numbers as equivalent decimals and fractions, and explain (orally) the solution method.	
	Lesson 15	Compare and contrast (orally) decimal expansions for rational and irrational numbers.	
		Coordinate (orally and in writing) repeating decimal expansions and rational numbers that represent the same number.	
	Let’s Put it to Work		
	Lesson 16	Apply ratios and the Pythagorean Theorem to solve a problem involving the aspect ratio of screens or photos, and explain (orally) the reasoning.	
		Describe (in writing and using other representations) characteristics of rectangles with the same aspect ratio or with different aspect ratios.	
Unit 9: Putting It All Together (Optional Unit)			
	Tessellations		**0 - 10 Days of Instruction -- 3 Weeks**
	Lesson 1 - Optional	Create and describe patterns with specific polygons that fill the plane.	

	Lesson 2 - Optional	Justify (orally and in writing) that regular triangles, squares, and hexagons are the only regular polygons that can be used to create a regular tessellation.	
	Lesson 3 - Optional	Generalize (orally) that any triangle or quadrilateral can be used to tessellate the plane.	
	The Weather		
	Lesson 4 - Optional	Contrast (orally) the benefits of modeling data using functions to identify input/output pairs and using statistics to analyze bivariate data.	
	Lesson 5 - Optional	Create a mathematical model of bivariate data using a scatter plot.	
		Describe (in writing) associations in bivariate data shown in a table or scatter plot.	
	Lesson 6 - Optional	Interpret a scatter plot and line of fit that model temperature and latitude, and explain (orally) limitations of the model.	
		Use a mathematical model of bivariate data to make predictions (in writing).	

Supports of Diversity, Equity and Inclusion

Please provide any information relative to supporting culturally responsive instruction, multi-language learners, and students with disabilities
<u>Review Site Information:</u> URL: review-ct.ilclassroom.com Username: CT@example.com Password: teacher **<u>Culturally Responsive Instruction:</u>** Illustrative Mathematics includes culturally relevant materials and culturally responsive teaching and instructional practices. Materials are inclusive of a variety of cultures and ethnicities and are free from bias in the portrayal of ethnic groups, gender, age, class, cultures, religions, and people with disabilities. We address racial, cultural, and religious bias in the following ways: ● The materials contain racial/ethnic balance in the main characters and illustrations. ● Minorities are represented as central figures in text and illustrations. ● Minority figures reflect qualities such as leadership, intelligence, imagination, and courage. ● The materials provide an opportunity for a variety of racial, ethnic, and cultural perspectives. ● The vocabulary or depiction of racism is avoided (i.e., insulting overtones). ● Race/culture stereotyping language is avoided. ● Biographical or historical content includes minority figures and their discoveries and contributions to society. **<u>Multi-Language Learners:</u>** In a problem-based mathematics classroom, sense-making and language are interwoven. Mathematics classrooms are language-rich, and therefore language demanding learning environments for every student. The linguistic demands of doing mathematics include

reading, writing, speaking, listening, conversing, and representing (Aguirre & Bunch, 2012). Students are expected to say or write mathematical explanations, state assumptions, make conjectures, construct mathematical arguments, and listen to and respond to the ideas of others. In an effort to advance the mathematics and language learning of all students, the materials purposefully engage students in sense-making and using language to negotiate meaning with their peers. To support students who are learning English in their development of language, this curriculum includes instruction devoted to fostering language development alongside mathematics learning, fostering language-rich environments where there is space for all students to participate.
This interwoven approach is grounded in four design principles that promote mathematical language use and development:

Principle 1. Support sense-making: Scaffold tasks and amplify language so students can make their own meaning. Students need multiple opportunities to talk about their mathematical thinking, negotiate meaning with others, and collaboratively solve problems with targeted guidance from the teacher. Teachers can make language more accessible by amplifying rather than simplifying speech or text. Simplifying includes avoiding the use of challenging words or phrases. Amplifying means anticipating where students might need support in understanding concepts or mathematical terms and providing multiple ways to access them.

Principle 2. Optimize output: Strengthen opportunities for students to describe their mathematical thinking to others, orally, visually, and in writing. All students benefit from repeated, strategically optimized, and supported opportunities to articulate mathematical ideas into linguistic expression, to communicate their ideas to others. Opportunities for students to produce output should be strategically optimized for both (a) important concepts of the unit or course, and (b) important disciplinary language functions (for example, explaining reasoning, critiquing the reasoning of others, making generalizations, and comparing approaches and representations).

Principle 3. Cultivate conversation: Strengthen opportunities for constructive mathematical conversations. Conversations are backand-forth interactions with multiple turns that build up ideas about math. Conversations act as scaffolds for students developing mathematical language because they provide opportunities to simultaneously make meaning, communicate that meaning, and refine the way content understandings are communicated. During effective discussions, students pose and answer questions, clarify what is being asked and what is happening in a problem, build common understandings, and share experiences relevant to the topic. Meaningful conversations depend on the teacher using activities and routines as opportunities to build a classroom culture that motivates and values efforts to communicate.

Principle 4. Maximize meta-awareness: Strengthen the meta-connections and distinctions between mathematical ideas, reasoning, and language. Meta-awareness, consciously thinking about one's own thought processes or language use, develops when students

consider how to improve their communication and reasoning about mathematical concepts. When students are using language in ways that are purposeful and meaningful for themselves, in their efforts to understand—and be understood by—each other, they are motivated to attend to ways in which language can be both clarified and clarifying. Students learning English benefit from being aware of how language choices are related to the purpose of the task and the intended audience, especially if oral or written work is required. Both metacognitive and metalinguistic awareness are powerful tools to help students self-regulate their academic learning and language acquisition.

These design principles and related mathematical language routines, described below, ensure language development is an integral part of planning and delivering instruction. Moreover, they work together to guide teachers to amplify the most important language that students are expected to know and use in each unit.

Mathematical Language Routines

Mathematical Language Routines (MLRs) are instructional routines that provide structured but adaptable formats for amplifying, assessing, and developing students' language. The MLRs included in this curriculum were selected because they simultaneously support students' learning of mathematical practices, content, and language. They are particularly well-suited to meet the needs of linguistically and culturally diverse students who are learning mathematics while simultaneously acquiring English. These routines are flexible and can be adapted to support students at all stages of language development in using and improving their English and disciplinary language use.

These routines are included in the Curriculum Guide and noted below:

- MLR 1: Stronger and Clearer Each Time
- MLR 2: Collect and Display
- MLR 3: Clarify, Critique, Correct
- MLR 4: Information Gap
- MLR 5: Co-Craft Questions
- MLR 6: Three Reads
- MLR 7: Compare and Connect
- MLR 8: Discussion Supports

MLRs are included in select activities in each unit to provide all students with explicit opportunities to develop mathematical and academic language proficiency. These "embedded" MLRs are described in the teacher notes for the lessons in which they appear.

Each lesson also includes optional, suggested MLRs that can be used to support access and language development for English learners, based on the language demands students will encounter. They are described in the activity narrative, under the heading "Access for English Learners." Teachers can use the suggested MLRs and language strategies as appropriate to provide students with access to an activity without reducing the mathematical demand of the task. When using these supports, teachers should take into account the language demands of the specific activity and the language needed to engage the content more broadly, in relation to their students' current ways of using language to communicate ideas as well as their students' English language proficiency. Using these supports can help maintain student engagement in mathematical discourse and ensure that struggle remains productive. All of the supports are designed to be used as needed, and use should fade out as students develop understanding and fluency with the English language.

In addition to the comprehensive pedagogical design of the program, Spanish translations are available for the educator components, including teacher slides, and the student components, including the student workbook (print version).

Materials are also available in Spanish as follows:

What's in Spanish for IM?

K-5	6-8	AGA
• Printed: Student Workbooks • eBook/PDF: Student, Teacher, Teacher Resource Pack • Spanish Lesson Cards **Other Materials** *(no solutions translated)* • Task Statements (PDF) • Cool-Down (PDF) • Practice Problems (PDF) • Unit Assessments (PDF) • Section Checkpoint Quizzes (PDF) • Family Supports (PDF) • Center Materials (PDF) • Glossary entries	**6-8 Courses Only (Not Acc.)** • Printed: Student Workbooks • eBook/PDF: Student **Other Materials** *(no solutions translated)* • Task Statements (PDF) • Cool-Down (PDF) • Practice Problems (PDF) • Unit Assessments Option B, (PDF) • Glossary entries	**Algebra 1 Only** eBook/PDF: Student Workbook *Print coming for BTS 2023 **Other Materials** *(no solutions translated)* • Task Statements (PDF) • Cool-Down (PDF) • Practice Problems (PDF) • Unit Assessments (PDF) • Modeling prompts • Glossary entries

Exceptional Learners:

Imagine Learning Illustrative Mathematics materials empower all students with activities that capitalize on their existing strengths and abilities to ensure that all learners can participate meaningfully in rigorous mathematical content. Lessons support a flexible approach to instruction and provide teachers with options for additional support to address the needs of a diverse group of students, positioning all learners as competent, valued contributors. When planning to support access, teachers should consider the strengths and needs of their particular students.

Each lesson is carefully designed to maximize engagement and accessibility for all students. Purposeful design elements that support access for all learners, but that are especially helpful for students with disabilities, include:

Lesson Structures are Consistent

The structure of every lesson is the same: warm-up, activities, synthesis, cool-down. By keeping the components of each lesson similar from day to day, the flow of work in class becomes predictable for students. This reduces cognitive demand and enables students to focus on the mathematics at hand rather than the mechanics of the lesson.

Concepts Develop from Concrete to Abstract
Mathematical concepts are introduced simply, concretely, and repeatedly, with complexity and abstraction developing over time. Students begin with concrete examples, and transition to diagrams and tables before relying exclusively on symbols to represent the mathematics they encounter.

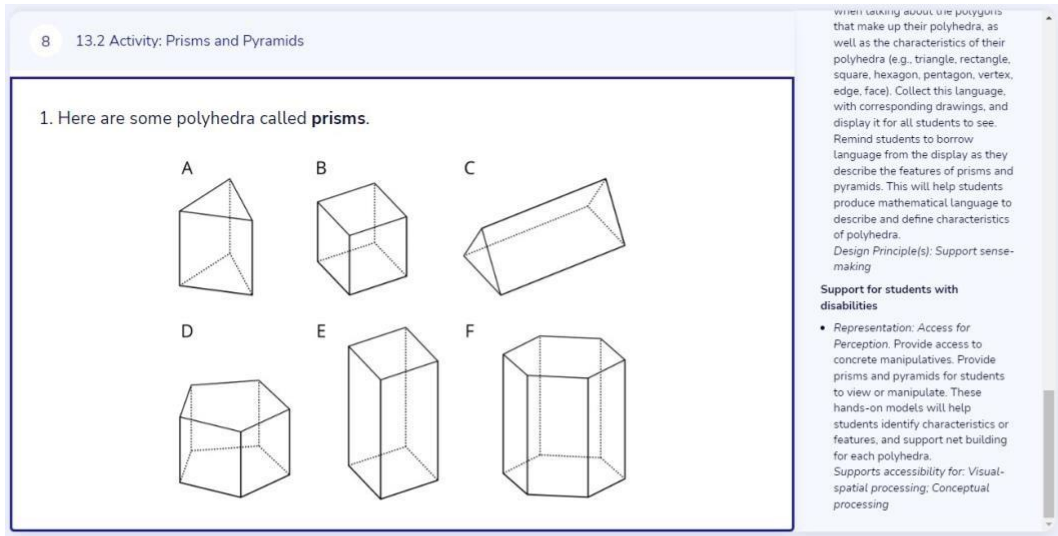
Individual to Pair, or Small Group to Whole Class Progression
Providing students with time to think through a situation or question independently before engaging with others allows students to carry the weight of learning, with support arriving just in time from the community of learners. This progression allows students to first activate what they already know, and continue to build from this base with others.

Opportunities to Apply Mathematics to Real-World Contexts
Giving students opportunities to apply the mathematics they learn clarifies and deepens their understanding of core math concepts and skills and provides motivation and support. Mathematical modeling is a powerful activity for all students, but especially students with disabilities. Each unit has a culminating activity designed to explore, integrate, and apply all the big ideas of the unit. Centering instruction on these contextual situations can provide students with disabilities an anchor on which to base their mathematical understandings.

Supplemental instructional strategies that can be used to increase access, reduce barriers and maximize learning are included in each lesson, listed in the activity narratives under "*Access for Students with Disabilities.*" Each support is aligned to the Universal Design for Learning Guidelines and based on one of the three principles of UDL, to provide alternative means of *engagement, representation,* or *action and expression*. These supports provide teachers with additional ways to adjust the learning environment so that students can access activities, engage in content, and communicate their understanding. Supports are tagged with the areas of cognitive functioning they are designed to address to help teachers identify and select appropriate supports for their students. Designed to facilitate access to Tier 1 instruction by capitalizing on student strengths to address challenges related to cognitive functions or disabilities, these strategies and supports are appropriate for any students who need additional support to access rigorous, grade-level content.

Teachers are encouraged to use what they know about their students' IEPs, strengths and challenges, and a UDL approach to ensure access.

There are embedded supports for exceptional students in most lessons. Teachers will find these in the **Teaching Notes** section. As of June 2020, Illustrative Mathematics 6-8 student facing materials meet Section 508 compliance standards, meaning that students can use assistive technology to navigate the site. Illustrative Mathematics K-5 digital materials were added during the 21-22 School Year and are 508 compliant as well. Outlined in the Curriculum Guide, there are features, supports, and strategies available.



The curriculum authors drew heavily on the UDL framework in the design of these materials. A number one design principle of the curriculum is “Access for all.” This foundational principle draws from the UDL framework and shapes the instructional goals, recommended practices, lesson plans, and assessments to support a flexible approach to instruction, ensuring all students have an equitable opportunity to learn.

Imagine Learning software is browser-based so it will work with any browser-based text-to-speech tools. Fonts can be adjusted in type and size. Non-text navigation elements can be adjusted in size. Math equation editing is available on assessment items and practice problems.

Imagine Learning can provide a NIMAS-compatible version of Illustrative Mathematics content. These files may be used for the production of alternate formats as permitted under the law for students with disabilities.