

Pacing Guide

- Build Conceptual Understanding
- Connect Concepts and Skills
- Apply and Practice

Lesson	Standards for Accelerated 7 Course	Pacing
Unit 1 RATIOS AND PROPORTIONAL REASONING		
Module 1: Identify and Represent Proportional Relationships		
Lesson 1.1 Explore Relationships	<ul style="list-style-type: none"> Recognize and represent proportional relationships between quantities. Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships. 	1 day
Lesson 1.2 Recognize Proportional Relationships in Tables	<ul style="list-style-type: none"> Decide whether two quantities are in a proportional relationship, e.g., by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin. Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships. Represent proportional relationships by equations. 	2 days
Lesson 1.3 Compute Unit Rates Involving Complex Fractions	<ul style="list-style-type: none"> Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units. 	2 days
Lesson 1.4 Recognize Proportional Relationships in Graphs	<ul style="list-style-type: none"> Decide whether two quantities are in a proportional relationship, e.g., by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin. Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships. Explain what a point (x, y) on the graph of a proportional relationship means in terms of the situation, with special attention to the points $(0, 0)$ and $(1, r)$ where r is the unit rate. Graph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways. 	2 days
Lesson 1.5 Use Proportional Relationships to Solve Rate Problems	<ul style="list-style-type: none"> Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships. Use proportional relationships to solve multistep ratio and percent problems. Graph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways. 	2 days

- Major
- Supporting
- Additional

In addition to the core instructional pacing below, HMH recommends the following:

- 3 days per year for the HMH Into Math Growth Measure assessments
 - 2 days per module for the Module Opener, Are You Ready?, Module Review, and Module Test
 - 1 day per unit for the Performance Task
- Using these recommendations, the total pacing for Accelerated 7 is 174 days.

Lesson	Standards for Accelerated 7 Course	Pacing
Lesson 1.6 Practice Proportional Reasoning with Scale Drawings	<ul style="list-style-type: none"> ● Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale. ■ Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units. ■ Use proportional relationships to solve multistep ratio and percent problems. 	2 days
Module 2: Proportional Reasoning with Percents		
Lesson 2.1 Percent Change	<ul style="list-style-type: none"> ■ Use proportional relationships to solve multistep ratio and percent problems. 	1 day
Lesson 2.2 Markups and Discounts	<ul style="list-style-type: none"> ■ Use proportional relationships to solve multistep ratio and percent problems. ■ Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related. 	1 day
Lesson 2.3 Taxes and Gratuities	<ul style="list-style-type: none"> ■ Use proportional relationships to solve multistep ratio and percent problems. 	1 day
Lesson 2.4 Commissions and Fees	<ul style="list-style-type: none"> ■ Use proportional relationships to solve multistep ratio and percent problems. 	1 day
Lesson 2.5 Simple Interest	<ul style="list-style-type: none"> ■ Use proportional relationships to solve multistep ratio and percent problems. 	1 day
Unit 2 NUMBER SYSTEMS AND OPERATIONS		
Module 3: Understand Addition and Subtraction of Rational Numbers		
Lesson 3.1 Add or Subtract a Positive Integer on a Number Line	<ul style="list-style-type: none"> ■ Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram. ■ Understand $p + q$ as the number located a distance q from p, in the positive or negative direction depending on whether q is positive or negative. Show that a number and its opposite have a sum of 0 (are additive inverses). Interpret sums of rational numbers by describing real-world contexts. 	1 day
Lesson 3.2 Add or Subtract a Negative Integer on a Number Line	<ul style="list-style-type: none"> ■ Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram. ■ Understand $p + q$ as the number located a distance q from p, in the positive or negative direction depending on whether q is positive or negative. Show that a number and its opposite have a sum of 0 (are additive inverses). Interpret sums of rational numbers by describing real-world contexts. 	2 days

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Module continued on next page →

Lesson	Standards for Accelerated 7 Course	Pacing
Module 3: Understand Addition and Subtraction of Rational Numbers		
Lesson 3.3 Use a Number Line to Add and Subtract Rational Numbers	<ul style="list-style-type: none">■ Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram.■ Describe situations in which opposite quantities combine to make 0.■ Understand $p + q$ as the number located a distance q from p, in the positive or negative direction depending on whether q is positive or negative. Show that a number and its opposite have a sum of 0 (are additive inverses). Interpret sums of rational numbers by describing real-world contexts.	2 days
Module 4: Fluency with Rational Number Operations		
Lesson 4.1 Compute Sums of Rational Numbers	<ul style="list-style-type: none">■ Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram.■ Understand $p + q$ as the number located a distance q from p, in the positive or negative direction depending on whether q is positive or negative. Show that a number and its opposite have a sum of 0 (are additive inverses). Interpret sums of rational numbers by describing real-world contexts.■ Understand subtraction of rational numbers as adding the additive inverse, $p - q = p + (-q)$. Show that the distance between two rational numbers on the number line is the absolute value of their difference, and apply this principle in real-world contexts.■ Solve real-world and mathematical problems involving the four operations with rational numbers.	2 days
Lesson 4.2 Compute Differences of Rational Numbers	<ul style="list-style-type: none">■ Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram.■ Understand subtraction of rational numbers as adding the additive inverse, $p - q = p + (-q)$. Show that the distance between two rational numbers on the number line is the absolute value of their difference, and apply this principle in real-world contexts.■ Solve real-world and mathematical problems involving the four operations with rational numbers.	2 days

Lesson	Standards for Accelerated 7 Course	Pacing
Lesson 4.3 Understand and Compute Products and Quotients of Rational Numbers	<ul style="list-style-type: none"> Understand that multiplication is extended from fractions to rational numbers by requiring that operations continue to satisfy the properties of operations, particularly the distributive property, leading to products such as $(-1)(-1) = 1$ and the rules for multiplying signed numbers. Interpret products of rational numbers by describing real-world contexts. Understand that integers can be divided, provided that the divisor is not zero, and every quotient of integers (with non-zero divisor) is a rational number. If p and q are integers, then $-\left(\frac{p}{q}\right) = \frac{(-p)}{q} = \frac{p}{(-q)}$. Interpret quotients of rational numbers by describing real-world contexts. Apply properties of operations as strategies to multiply and divide rational numbers. Solve real-world and mathematical problems involving the four operations with rational numbers. 	2 days
Lesson 4.4 Write Rational Numbers as Decimals	<ul style="list-style-type: none"> Understand that integers can be divided, provided that the divisor is not zero, and every quotient of integers (with non-zero divisor) is a rational number. If p and q are integers, then $-\left(\frac{p}{q}\right) = \frac{(-p)}{q} = \frac{p}{(-q)}$. Interpret quotients of rational numbers by describing real-world contexts. Convert a rational number to a decimal using long division; know that the decimal form of a rational number terminates in 0s or eventually repeats. 	2 days
Lesson 4.5 Multiply and Divide Rational Numbers in Context	<ul style="list-style-type: none"> Understand that multiplication is extended from fractions to rational numbers by requiring that operations continue to satisfy the properties of operations, particularly the distributive property, leading to products such as $(-1)(-1) = 1$ and the rules for multiplying signed numbers. Interpret products of rational numbers by describing real-world contexts. Solve real-world and mathematical problems involving the four operations with rational numbers. 	1 day
Module 5: Applying Properties to Operations		
Lesson 5.1 Apply Properties to Multi-Step Problems with Rational Numbers	<ul style="list-style-type: none"> Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram. Apply properties of operations as strategies to add and subtract rational numbers. Apply properties of operations as strategies to multiply and divide rational numbers. Solve real-world and mathematical problems involving the four operations with rational numbers. 	2 days

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Module 5: Applying Properties to Operations		
Lesson 5.2 Solve Multi-step Problems with Rational Numbers in Context	<ul style="list-style-type: none"> Solve real-world and mathematical problems involving the four operations with rational numbers. Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. 	2 days
Lesson 5.3 Add, Subtract, Factor, and Expand Algebraic Expressions	<ul style="list-style-type: none"> Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients. Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related. 	2 days
Unit 3 EQUATIONS AND INEQUALITIES IN ONE VARIABLE		
Module 6: Solve Linear Equations		
Lesson 6.1 Write Two-Step Equations for Situations	<ul style="list-style-type: none"> Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities. 	1 day
Lesson 6.2 Apply Two-Step Equations to Solve Real-World Problems	<ul style="list-style-type: none"> Solve word problems leading to equations of the form $px + q = r$ and $p(x + q) = r$, where p, q, and r are specific rational numbers. Solve equations of these forms fluently. Compare an algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach. Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. 	1 day
Lesson 6.3 Solve Multi-Step Linear Equations	<ul style="list-style-type: none"> Solve linear equations in one variable. Solve linear equations with rational number coefficients, including equations whose solutions require expanding expressions using the distributive property and collecting like terms. 	2 days

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Lesson 6.4 Examine Special Cases	<ul style="list-style-type: none"> ■ Solve linear equations in one variable. ■ Give examples of linear equations in one variable with one solution, infinitely many solutions, or no solutions. Show which of these possibilities is the case by successively transforming the given equation into simpler forms, until an equivalent equation of the form $x = a$, $a = a$, or $a = b$ results (where a and b are different numbers). ■ Solve linear equations with rational number coefficients, including equations whose solutions require expanding expressions using the distributive property and collecting like terms. 	1 day
Lesson 6.5 Apply Linear Equations	<ul style="list-style-type: none"> ■ Solve word problems leading to equations of the form $px + q = r$ and $p(x + q) = r$, where p, q, and r are specific rational numbers. Solve equations of these forms fluently. Compare an algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach. ■ Solve linear equations in one variable. ■ Give examples of linear equations in one variable with one solution, infinitely many solutions, or no solutions. Show which of these possibilities is the case by successively transforming the given equation into simpler forms, until an equivalent equation of the form $x = a$, $a = a$, or $a = b$ results (where a and b are different numbers). ○ Use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write and solve simple equations for an unknown angle in a figure. 	2 days
Module 7: Solve Problems Using Inequalities		
Lesson 7.1 Understand and Apply Properties to Solve One-Step Inequalities	<ul style="list-style-type: none"> ■ Solve word problems leading to inequalities of the form $px + q > r$ or $px + q < r$, where p, q, and r are specific rational numbers. Graph the solution set of the inequality and interpret it in the context of the problem. 	2 days
Lesson 7.2 Write Two-Step Inequalities for Situations	<ul style="list-style-type: none"> ■ Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities. 	1 day
Lesson 7.3 Apply Two-Step Inequalities to Solve Problems	<ul style="list-style-type: none"> ■ Solve word problems leading to inequalities of the form $px + q > r$ or $px + q < r$, where p, q, and r are specific rational numbers. Graph the solution set of the inequality and interpret it in the context of the problem. 	1 day

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Unit 4 TRANSFORM AND CONSTRUCT GEOMETRIC FIGURES		
Module 8: Transformations and Congruence		
Lesson 8.1 Investigate Transformations	<ul style="list-style-type: none"> Verify experimentally the properties of rotations, reflections, and translations: Lines are taken to lines, and line segments to line segments of the same length. Verify experimentally the properties of rotations, reflections, and translations: Angles are taken to angles of the same measure. Verify experimentally the properties of rotations, reflections, and translations: Parallel lines are taken to parallel lines. 	1 day
Lesson 8.2 Explore Translations	<ul style="list-style-type: none"> Verify experimentally the properties of rotations, reflections, and translations: Lines are taken to lines, and line segments to line segments of the same length. Verify experimentally the properties of rotations, reflections, and translations: Angles are taken to angles of the same measure. Verify experimentally the properties of rotations, reflections, and translations: Parallel lines are taken to parallel lines. Describe the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates. 	2 days
Lesson 8.3 Explore Reflections	<ul style="list-style-type: none"> Verify experimentally the properties of rotations, reflections, and translations: Lines are taken to lines, and line segments to line segments of the same length. Verify experimentally the properties of rotations, reflections, and translations: Angles are taken to angles of the same measure. Verify experimentally the properties of rotations, reflections, and translations: Parallel lines are taken to parallel lines. Describe the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates. 	2 days
Lesson 8.4 Explore Rotations	<ul style="list-style-type: none"> Verify experimentally the properties of rotations, reflections, and translations: Lines are taken to lines, and line segments to line segments of the same length. Verify experimentally the properties of rotations, reflections, and translations: Angles are taken to angles of the same measure. Verify experimentally the properties of rotations, reflections, and translations: Parallel lines are taken to parallel lines. Describe the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates. 	2 days
Lesson 8.5 Understand and Recognize Congruent Figures	<ul style="list-style-type: none"> Understand that a two-dimensional figure is congruent to another if the second can be obtained from the first by a sequence of rotations, reflections, and translations; given two congruent figures, describe a sequence that exhibits the congruence between them. Describe the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates. 	2 days

Lesson	Standards for Accelerated 7 Course	Pacing
Module 9: Draw and Analyze Two-Dimensional Figures		
Lesson 9.1 Draw Shapes with Given Conditions	○ Draw (freehand, with ruler and protractor, and with technology) geometric shapes with given conditions. Focus on constructing triangles from three measures of angles or sides, noticing when the conditions determine a unique triangle, more than one triangle, or no triangle.	1 day
Lesson 9.2 Draw and Construct Triangles Given Side Lengths	○ Draw (freehand, with ruler and protractor, and with technology) geometric shapes with given conditions. Focus on constructing triangles from three measures of angles or sides, noticing when the conditions determine a unique triangle, more than one triangle, or no triangle.	2 days
Lesson 9.3 Draw and Construct Triangles Given Angle Measures	○ Draw (freehand, with ruler and protractor, and with technology) geometric shapes with given conditions. Focus on constructing triangles from three measures of angles or sides, noticing when the conditions determine a unique triangle, more than one triangle, or no triangle.	1 day
Lesson 9.4 Draw and Analyze Shapes to Solve Problems	○ Draw (freehand, with ruler and protractor, and with technology) geometric shapes with given conditions. Focus on constructing triangles from three measures of angles or sides, noticing when the conditions determine a unique triangle, more than one triangle, or no triangle.	1 day
Module 10: Transformations and Similarity		
Lesson 10.1 Investigate Reductions and Enlargements	■ Describe the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates.	2 days
Lesson 10.2 Explore Dilations	■ Describe the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates.	2 days
Lesson 10.3 Understand and Recognize Similar Figures	■ Understand that a two-dimensional figure is similar to another if the second can be obtained from the first by a sequence of rotations, reflections, translations, and dilations; given two similar two-dimensional figures, describe a sequence that exhibits the similarity between them.	2 days
Unit 5 SIMILARITY, SLOPE, AND LINEAR RELATIONSHIPS		
Module 11: Angle Relationships		
Lesson 11.1 Develop Angle Relationships for Triangles	■ Use informal arguments to establish facts about the angle sum and exterior angle of triangles, about the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles.	2 days
Lesson 11.2 Investigate Angle-Angle Similarity	■ Use informal arguments to establish facts about the angle sum and exterior angle of triangles, about the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles.	2 days
Lesson 11.3 Explore Parallel Lines Cut by a Transversal	■ Use informal arguments to establish facts about the angle sum and exterior angle of triangles, about the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles.	2 days

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Module 12: Linear Relationships		
Lesson 12.1 Explain Slope with Similar Triangles	<ul style="list-style-type: none"> Use similar triangles to explain why the slope m is the same between any two distinct points on a non-vertical line in the coordinate plane; derive the equation $y = mx$ for a line through the origin and the equation $y = mx + b$ for a line intercepting the vertical axis at b. 	1 day
Lesson 12.2 Derive $y = mx$	<ul style="list-style-type: none"> Graph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways. Use similar triangles to explain why the slope m is the same between any two distinct points on a non-vertical line in the coordinate plane; derive the equation $y = mx$ for a line through the origin and the equation $y = mx + b$ for a line intercepting the vertical axis at b. 	1 day
Lesson 12.3 Derive and Interpret $y = mx + b$	<ul style="list-style-type: none"> Use similar triangles to explain why the slope m is the same between any two distinct points on a non-vertical line in the coordinate plane; derive the equation $y = mx$ for a line through the origin and the equation $y = mx + b$ for a line intercepting the vertical axis at b. 	1 day
Lesson 12.4 Describe and Sketch Nonlinear Relationships	<ul style="list-style-type: none"> Describe qualitatively the functional relationship between two quantities by analyzing a graph (e.g., where the function is increasing or decreasing, linear or nonlinear). Sketch a graph that exhibits the qualitative features of a function that has been described verbally. 	2 days
Unit 6 APPLICATIONS OF REAL NUMBERS AND EXPONENTS		
Module 13: Real Numbers		
Lesson 13.1 Understand Rational and Irrational Numbers	<ul style="list-style-type: none"> Know that numbers that are not rational are called irrational. Understand informally that every number has a decimal expansion; for rational numbers show that the decimal expansion repeats eventually, and convert a decimal expansion which repeats eventually into a rational number. 	1 day
Lesson 13.2 Investigate Roots	<ul style="list-style-type: none"> Use square root and cube root symbols to represent solutions to equations of the form $x^2 = p$ and $x^3 = p$, where p is a positive rational number. Evaluate square roots of small perfect squares and cube roots of small perfect cubes. Know that $\sqrt{2}$ is irrational. 	2 days
Lesson 13.3 Order Real Numbers	<ul style="list-style-type: none"> Use rational approximations of irrational numbers to compare the size of irrational numbers, locate them approximately on a number line diagram, and estimate the value of expressions (e.g., π^2). 	1 day

Lesson	Standards for Accelerated 7 Course	Pacing
Module 14: The Pythagorean Theorem		
Lesson 14.1 Prove the Pythagorean Theorem and Its Converse	<div>■ Explain a proof of the Pythagorean Theorem and its converse.</div>	1 day
Lesson 14.2 Apply the Pythagorean Theorem	<div>■ Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions.</div>	2 days
Lesson 14.3 Apply the Pythagorean Theorem in the Coordinate Plane	<div>■ Apply the Pythagorean Theorem to find the distance between two points in a coordinate system.</div>	1 day
Module 15: Exponents and Scientific Notation		
Lesson 15.1 Know and Apply Properties of Exponents	<div>■ Know and apply the properties of integer exponents to generate equivalent numerical expressions.</div>	2 days
Lesson 15.2 Understand Scientific Notation	<div>■ Use numbers expressed in the form of a single digit times an integer power of 10 to estimate very large or very small quantities, and to express how many times as much one is than the other.</div>	2 days
Lesson 15.3 Compute with Scientific Notation	<div>■ Perform operations with numbers expressed in scientific notation, including problems where both decimal and scientific notation are used. Use scientific notation and choose units of appropriate size for measurements of very large or very small quantities (e.g., use millimeters per year for seafloor spreading). Interpret scientific notation that has been generated by technology.</div>	1 day
Unit 7 AREA AND VOLUME		
Module 16: Analyze Figures to Find Circumference and Area		
Lesson 16.1 Derive and Apply Formulas for Circumference	<div>○ Know the formulas for the area and circumference of a circle and use them to solve problems; give an informal derivation of the relationship between the circumference and area of a circle.</div> <div>■ Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies.</div>	1 day
Lesson 16.2 Derive and Apply a Formula for the Area of a Circle	<div>○ Know the formulas for the area and circumference of a circle and use them to solve problems; give an informal derivation of the relationship between the circumference and area of a circle.</div> <div>■ Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies.</div>	1 day

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Module 16: Analyze Figures to Find Circumference and Area		
Lesson 16.3 Areas of Composite Figures	<ul style="list-style-type: none"> Solve real-world and mathematical problems involving area, volume and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms. Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. 	1 day
Module 17: Cross Sections, Surface Area, and Volume		
Lesson 17.1 Describe and Analyze Cross Sections of Solids	<ul style="list-style-type: none"> Describe the two-dimensional figures that result from slicing three-dimensional figures, as in plane sections of right rectangular prisms and right rectangular pyramids. 	1 day
Lesson 17.2 Derive and Apply Formulas for Surface Areas of Cubes and Right Prisms	<ul style="list-style-type: none"> Solve real-world and mathematical problems involving area, volume and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms. Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. 	1 day
Lesson 17.3 Derive and Apply a Formula for the Volume of a Right Prism	<ul style="list-style-type: none"> Solve real-world and mathematical problems involving area, volume and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms. Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. 	1 day
Lesson 17.4 Find Volume of Cylinders	<ul style="list-style-type: none"> Know the formulas for the volumes of cones, cylinders, and spheres and use them to solve real-world and mathematical problems. Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. 	1 day

Lesson	Standards for Accelerated 7 Course	Pacing
Lesson 17.5 Find Volume of Cones and Spheres	<ul style="list-style-type: none"> ○ Know the formulas for the volumes of cones, cylinders, and spheres and use them to solve real-world and mathematical problems. ■ Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. 	2 days
Lesson 17.6 Solve Multi-Step Problems with Surface Area and Volume	<ul style="list-style-type: none"> ○ Solve real-world and mathematical problems involving area, volume and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms. ○ Know the formulas for the volumes of cones, cylinders, and spheres and use them to solve real-world and mathematical problems. ■ Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. 	1 day
Unit 8 DATA ANALYSIS AND SAMPLING		
Module 18: Proportional Reasoning with Samples		
Lesson 18.1 Understand Representative Samples	<ul style="list-style-type: none"> □ Understand that statistics can be used to gain information about a population by examining a sample of the population; generalizations about a population from a sample are valid only if the sample is representative of that population. Understand that random sampling tends to produce representative samples and support valid inferences. 	1 day
Lesson 18.2 Make Inferences from a Random Sample	<ul style="list-style-type: none"> □ Use data from a random sample to draw inferences about a population with an unknown characteristic of interest. Generate multiple samples (or simulated samples) of the same size to gauge the variation in estimates or predictions. 	2 days
Lesson 18.3 Make Inferences from Repeated Random Samples	<ul style="list-style-type: none"> □ Use data from a random sample to draw inferences about a population with an unknown characteristic of interest. Generate multiple samples (or simulated samples) of the same size to gauge the variation in estimates or predictions. 	1 day

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Module 19: Use Statistics and Graphs to Compare Data		
Lesson 19.1 Compare Center and Spread of Data Displayed in Dot Plots	<ul style="list-style-type: none"> Informally assess the degree of visual overlap of two numerical data distributions with similar variabilities, measuring the difference between the centers by expressing it as a multiple of a measure of variability. Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations. 	1 day
Lesson 19.2 Compare Center and Spread of Data Displayed in Box Plots	<ul style="list-style-type: none"> Informally assess the degree of visual overlap of two numerical data distributions with similar variabilities, measuring the difference between the centers by expressing it as a multiple of a measure of variability. Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations. 	1 day
Lesson 19.3 Compare Means Using Mean Absolute Deviation and Repeated Sampling	<ul style="list-style-type: none"> Informally assess the degree of visual overlap of two numerical data distributions with similar variabilities, measuring the difference between the centers by expressing it as a multiple of a measure of variability. Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations. 	1 day
Unit 9 PROBABILITY		
Module 20: Understand and Apply Experimental Probability		
Lesson 20.1 Understand Probability of an Event	<ul style="list-style-type: none"> Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. Larger numbers indicate greater likelihood. A probability near 0 indicates an unlikely event, a probability around 1/2 indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event. 	1 day
Lesson 20.2 Find Experimental Probability of Simple Events	<ul style="list-style-type: none"> Approximate the probability of a chance event by collecting data on the chance process that produces it and observing its long-run relative frequency, and predict the approximate relative frequency given the probability. Develop a probability model (which may not be uniform) by observing frequencies in data generated from a chance process. 	2 days
Lesson 20.3 Find Experimental Probability of Compound Events	<ul style="list-style-type: none"> Understand that, just as with simple events, the probability of a compound event is the fraction of outcomes in the sample space for which the compound event occurs. Represent sample spaces for compound events using methods such as organized lists, tables and tree diagrams. For an event described in everyday language (e.g., “rolling double sixes”), identify the outcomes in the sample space which compose the event. Design and use a simulation to generate frequencies for compound events. 	2 days

Lesson	Standards for Accelerated 7 Course	Pacing
Lesson 20.4 Use Experimental Probability and Proportional Reasoning to Make Predictions	<div> <div>□</div> Approximate the probability of a chance event by collecting data on the chance process that produces it and observing its long-run relative frequency, and predict the approximate relative frequency given the probability. </div> <div> <div>■</div> Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. </div>	1 day
Module 21: Understand and Apply Theoretical Probability		
Lesson 21.1 Find Theoretical Probability of Simple Events	<div> <div>□</div> Approximate the probability of a chance event by collecting data on the chance process that produces it and observing its long-run relative frequency, and predict the approximate relative frequency given the probability. </div> <div> <div>□</div> Develop a probability model and use it to find probabilities of events. Compare probabilities from a model to observed frequencies; if the agreement is not good, explain possible sources of the discrepancy. </div> <div> <div>□</div> Develop a uniform probability model by assigning equal probability to all outcomes, and use the model to determine probabilities of events. </div>	2 days
Lesson 21.2 Find Theoretical Probability of Compound Events	<div> <div>□</div> Understand that, just as with simple events, the probability of a compound event is the fraction of outcomes in the sample space for which the compound event occurs. </div> <div> <div>□</div> Represent sample spaces for compound events using methods such as organized lists, tables and tree diagrams. For an event described in everyday language (e.g., “rolling double sixes”), identify the outcomes in the sample space which compose the event. </div>	2 days
Lesson 21.3 Use Theoretical Probability and Proportional Reasoning to Make Predictions	<div> <div>□</div> Approximate the probability of a chance event by collecting data on the chance process that produces it and observing its long-run relative frequency, and predict the approximate relative frequency given the probability. </div> <div> <div>□</div> Develop a uniform probability model by assigning equal probability to all outcomes, and use the model to determine probabilities of events. </div> <div> <div>■</div> Solve multi-step real-life and mathematical problems posed with positive . . . rational numbers . . . </div>	1 day
Lesson 21.4 Conduct Simulations	<div> <div>□</div> Design and use a simulation to generate frequencies for compound events. </div>	1 day