TIMELINE	TOPIC	PRIORITY	STANDARD	LEARNING TARGETS
UNIT 1 **RATIOS & PROPORTIONS**	1.1 – 1 and 3		6. RP.1 Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities.	Identify ratios, rates, and unit rates. Use ratios, rates, and unit rates to analyze problems.
		I	7.RP.1 Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units.	
	1.3 – 1, 2, and 3	I	7.RP.1 Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units.	Write ratios and rates. Compute unit rates with ratios of fractions, including lengths, areas and other quantities measured in like and different units. Scale up and scale down proportions.
	1.4 – 1	I	7.RP.1 Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units.	Calculate the unit rate using tables. Solve proportions using unit rates.
		I	7. RP.2.b Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships.	
	1.5 – 2 and 3	I	7.RP.1 Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units.	Solve proportions using the scaling method. Solve proportions by cross multiplying.
		C	7. RP.2.c Represent proportional relationships by equations.	
		E	7. RP.3 Use proportional relationships to solve multistep ratio and percent problems.	
	1.6 – 1	I	7.RP.1 Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units.	Use unit rates to determine the better buy.

		I	7. RP.2.b Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships.	
		E	7. RP.3 Use proportional relationships to solve multistep ratio and percent problems.	
UNIT 2 Proportional Reasoning	2.1 – 1 and 2	I	7.RP.1 Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units.	Determine whether two quantities are proportional from either a table or graph.
		I	7. RP.2.a 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.	
		E	7. RP.2.d 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.	
	2.2 – 1, 2, and 3	I	7. RP.2.a 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.	Interpret and explain what a point (x,y) means on a proportional graph, paying special attention to (0,0) and (1,r), where r is the unit rate.
	2.3 – 1, 2, 4, 5	I	7.RP.2.b Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships.	Identify the constant of proportionality. Write equations using the COP. Solve problems using the COP.
		C	7.RP.2.c Represent proportional relationships by equations.	

	2.5 – 1, 2, and 4	I	7.RP.2.a 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.	Graph relationships that are directly proportional. Interpret and explain what a point (x,y) means on a proportional graph, paying special attention to (0,0) and (1,r), where r is the unit rate. Identify the Constant of Proportionality from a graph. Determine whether two quantities on a graph are in a proportional relationship.
		I	7.RP.2.b Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships.	
		C	7.RP.2.c Represent proportional relationships by equations.	
		E	7.RP.2.d 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.	
	2.6 – 1 and 2	I	7.RP.2.a 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.	Solve direct variation problems.
		I	7.RP.2.b Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships.	

		C	7.RP.2.c Represent proportional relationships by equations.	
	2.7	I	7.RP.2.a 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.	DO FOR REVIEW ONLY!
		I	7.RP.2.b Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships.	
		C	7.RP.2.c Represent proportional relationships by equations.	
		E	7.RP.2.d 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.	
UNIT 3 Percents	3.1 – 1 and 2	I	7.RP.1 Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units.	Estimate and calculate values using rates. Estimate and calculate the values of percents.
		E	7.RP.3 Use proportional relationships to solve multistep ratio and percent problems.	
	3.2 – 1, 2, and 3	I	7.RP.1 Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units.	Solve problems involving percents.
			7.RP.2.c Represent proportional relationships by equations.	
		E	7.RP.3 Use proportional relationships to solve multistep ratio and percent problems.	
	3.3 – 1 and 2	C	7.RP.2.c Represent proportional relationships by equations.	Solve proportions. Solve percent equations.
		E	7.RP.3 Use proportional relationships to solve multistep ratio and percent problems.	

	3.4 – 1, 2, and 3	I	7.RP.2.a 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.	Calculate simple interest. Calculate the percent of increase and decrease. Calculate discount. Calculate tax. Calculate depreciate.
		C	7.RP.2.c Represent proportional relationships by equations.	
		E	7.RP.3 Use proportional relationships to solve multistep ratio and percent problems.	
	3.5 – 1, 2, and 3	I	7.RP.2.a 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.	Solve percent problems using direct variation. Write equations to show the constant of proportionality.
		I	7.RP.2.b Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships.	
		C	7.RP.2.c Represent proportional relationships by equations.	
		E	7.RP.3 Use proportional relationships to solve multistep ratio and percent problems.	
UNIT 4 **Addition and Subtraction of Rational Numbers**	4.1 – 1 and 2	C	7.NS.1.a Describe situations in which opposite quantities combine to make 0.	Represent numbers as positive and negative integers. Use a model to represent the sum of a positive and negative integer.
		I	7.NS.1.b 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.	
	4.2 – 1	I	7.NS.1.b 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.	Model the addition of integers on a number line. Develop a rule for adding integers.
	4.3 – 1	C	7.NS.1.a Describe situations in which opposite quantities combine to make 0.	Model the addition of integers using two-color counters. Develop a rule for adding integers.
		I	7.NS.1.b 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.	
		E	7.NS.1.c 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.	
	4.4 – 1, 2, and 7	C	7.NS.1.a Describe situations in which opposite quantities combine to make 0.	Model subtraction of integers using two-color counters. Model subtraction of integers on a number line. Develop a rule for subtracting integers.
		I	7.NS.1.b 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.	
		I	7.NS.1.c 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.	
		E	7.NS.1.d Apply properties of operations as strategies to add and subtract rational numbers.	
	4.5 – 1, 2, and 3	I	7.NS.1.b 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.	Add and subtract rational numbers.
		I	7.NS.1.c 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.	
		E	7.NS.1.d Apply properties of operations as strategies to add and subtract rational numbers.	
UNIT 5 Multiplication and Division of Rational Numbers	5.1 – 1 and 2	I	7.NS.2.a 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.	Multiply integers. Divide integers.
		I	7.NS.2.b 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 -(p/q) = (-p)/q = p/(-q). Interpret quotients of rational numbers by describing real-world contexts.	

		E	7.NS.2.c Apply properties of operations as strategies to multiply and divide rational numbers.	
	5.2 – 1 and 2	I	7.NS.2.a 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.	Multiply rational numbers. Divide rational numbers.
		I	7.NS.2.b 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 -(p/q) = (-p)/q = p/(-q). Interpret quotients of rational numbers by describing real-world contexts.	
		E	7.NS.2.c Apply properties of operations as strategies to multiply and divide rational numbers.	
	5.3 – 1 and 2	E	7.NS.1.d Apply properties of operations as strategies to add and subtract rational numbers.	Simplify expressions and equations using the number properties and the order of operations. Justify steps in simplifying expressions and equations using the number properties and the order of operations.
		I	7.NS.2.a 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.	

		E	7.NS.2.c Apply properties of operations as strategies to multiply and divide rational numbers.	
	5.4 – 1, 2, and 3	E	7.NS.1.d Apply properties of operations as strategies to add and subtract rational numbers.	Model a situation with an expression using rational numbers. Evaluate rational expressions.
		I	7.NS.2.a 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.	
		I	7.NS.2.b 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 -(p/q) = (-p)/q = p/(-q). Interpret quotients of rational numbers by describing real-world contexts.	
		E	7.NS.2.c Apply properties of operations as strategies to multiply and divide rational numbers.	
		E	7.NS.3 Solve real-world and mathematical problems involving the four operations with rational numbers.	
	5.5 – 1 and 2	E	7.NS.1.d Apply properties of operations as strategies to add and subtract rational numbers.	Use decimals and fractions to evaluate arithmetic expressions. Convert fractions to decimals. Represent fractions as repeating decimals.
		I	7.NS.2.d 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.	

UNIT 6 Numerical and Algebraic Expressions and Equations	6.1 – 1, 2, 3, 4	C	6.EE.6 Understand a rational number as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane with negative number coordinates.	Evaluate algebraic expressions.
		E	7.NS.3 Solve real-world and mathematical problems involving the four operations with rational numbers.	
	6.2 – 1, 2	E	7.NS.3 Solve real-world and mathematical problems involving the four operations with rational numbers.	Rewrite expressions using the distributive property. Simplify expressions using the distributive property.
		E	7.EE.1 Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions	
		I	7.EE.2 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.	
	6.3 – 1, 2, 3, 4	E	7.EE.1 Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions	Use the distributive property to factor expressions. Combine like terms to simplify expressions.
		I	7.EE.2 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.	
	6.4 – 1, 2, 3	E	7.EE.1 Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions	Simplify algebraic expressions. Determine if algebraic expressions are equivalent by graphing, simplifying, and evaluating

				expressions.
		I	7.EE.2 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.	
	6.5 – 1, 2	E	7.EE.1 Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions	Simplify algebraic expressions using operations and their properties.
		I	7.EE.2 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.	
UNIT 7 **Linear Equations and Inequalities**	7.1 – 1	I	7.EE.2 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.	Model situations using picture algebra.
		E	7.EE.3 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.	
		I	7.EE.4.a 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.	
	7.2 – 1, 2	E	7.EE.3 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.	Model equations using balances. Use properties of equality to solve equations. Solve two-step equations.

		I	7.EE.4.a 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.	
	7.3 – 1, 2	E	7.EE.3 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.	Write two-step equations. Solve two-step equations.
		I	7.EE.4.a 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.	
	7.4 – 1, 2	E	7.EE.1 Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions	Write two-step equations. Solve two-step equations.
		I	7.EE.2 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.	
		E	7.EE.3 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.	
		I	7.EE.4.a 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.	
	7.5 – 1, 2	E	7.EE.3 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.	Write inequalities. Graph inequalities. Solve inequalities.
		I	7.EE.4.a 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.	
		I	7.EE.4.b 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.	
UNIT 8 **Algebraic Reasoning**	8.1 – 1, 2, 3	E	7.EE.3 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.	Write equations.
		I	7.EE.4a 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.	
	8.2 – 1	I	7.EE.4a 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,	Write equations.

			identifying the sequence of the operations used in each approach.	
	8.3 – 2, 4	E	7.EE.3 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.	Write equations. Solve equations containing decimals. Solve equations with variables on both sides.
		I	7.EE.4a 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.	
	8.4 – 1	E	7.EE.3 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.	Write equations. Interpret negative solutions.
		I	7.EE.4a 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.	
	8.5 – 1, 2	E	7.EE.3 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.	Calculate the unit rate of change. Interpret the unit rate of change in a problem situation.

		I	7.EE.4a 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.	
		I	7.EE.4.b 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.	
	8.6 – 1, 2, 3, 4	E	7.EE.3 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.	DO FOR REVIEW OF CHAPTER 8!
		I	7.EE.4.a 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.	
UNIT 9 **Angles**	9.1 – 4	C	7.G.2 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.	Duplicate line segments.
	9.2 – 2, 3, 4	C	7.G.2 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.	Measure angles. Classify angles as right, acute, obtuse, or straight angles. Duplicate angles.
	9.3 – 1, 5, 6, 7	C	7.G.2 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	Determine the supplement or complement of an angle. Identify adjacent angles.

			triangle, more than one triangle, or no triangle.	Identify linear pairs. Identify vertical angles.
		I	7.G.5 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.	
UNIT 10 **Triangles**	10.1 – 2, 3	C	7.G.2 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.	Describe the relationship between the interior angle measures and the side lengths of a triangle. Prove Exterior Angle Theorem.
	10.2 – 1, 2, 3	C	7.G.2 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.	Construct triangles.
	10.4 – 2, 3	C	7.G.2 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.	Prove the Triangle Inequality Theorem.
UNIT 11 **Scale Drawing**	11.1	I	7.G.1 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.	Calculate actual lengths from a scale drawing. Calculate model lengths from a scale drawing.
	11.2	I	7.G.1 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.	

	11.3	I	7.G.1 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.	
	11.4	I	7.G.1 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.	
UNIT 12	12.1	I	7.G.4 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.	Identify the radius, diameter, and center of a circle.
	12.2	I	7.G.4 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.	Calculate the circumference of a circle.
	12.3	I	7.G.4 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.	Calculate the area of a circle.
	12.4	I	7.G.4 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.	Calculate the area of composite figures.
UNIT 13	13.1 – 1	I	7.G.3 Describe the two-dimensional figures that result from slicing three-dimensional figures, as in plane sections of right rectangular prisms and right rectangular pyramids.	Determine the cross section formed from slicing a cube.
	13.2 – 1	I	7.G.3 Describe the two-dimensional figures that result from slicing three-dimensional figures, as in plane sections of right rectangular prisms and right rectangular pyramids.	Determine the cross section formed from slicing a right rectangular

				prism.
	13.3 – 1	I	7.G.3 Describe the two-dimensional figures that result from slicing three-dimensional figures, as in plane sections of right rectangular prisms and right rectangular pyramids.	Determine the cross sections formed from slicing a square pyramid and a right rectangular pyramid.
	13.4 – 1, 2	I	7.G.6 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.	Calculate the surface area of a rectangular prism. Calculate the volume of a rectangular prism.
	13.5 – 1, 2	I	7.G.6 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.	Calculate the surface area of a square pyramid. Calculate the volume of a square pyramid.
UNIT 14/15		I	7.SP.1 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.	Identify the population and the sample. Determine if a sample is representative Determine if a sample is random. Make predictions based on randomly sampled survey data using proportions. Calculate mean, median, mode, range Calculate the measures of variation (Five number summary) Compare the measures of central tendency and measures of variation of two data distributions.

				(dot plot, box plot, lists of data)
		C	7.SP.2 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.	
		I	7.SP.3 Informally assess the degree of visual overlap of two numerical data distributions with similar variability's, measuring the difference between the centers by expressing it as a multiple of a measure of variability.	
		I	7.SP.4 Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations.	
UNIT 16/17		I	7.SP.5 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.	
		I	7.SP.6 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.	Calculate experimental probability. Use proportions to make predictions.
		I	7.SP.7.a Develop a uniform probability model by assigning equal probability to all outcomes, and use the model to determine probabilities of events.	Calculate theoretical probability.
		C	7.SP.7.b Develop a probability model (which may not be uniform) by observing frequencies in data generated from a chance process.	
		I	7.SP.8.a 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.	Calculate the probability of independent and dependent events.

		I	7. SP.8.b 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.	Represent sample spaces of compound events using tree diagrams.
		C	7. SP.8.c Design and use a simulation to generate frequencies for compound events.	