

TERM 1							
DATE	WEEK	UNIT	STUDENT LEARNING OBJECTIVE	CORRESPONDING CCSS	SCF	ASSESSMENT	ASS DATE
	Week 1	1	<p><b>The Number System</b></p> <ul style="list-style-type: none"> <li>Describe and model, on a horizontal and vertical number line, real-world situations in which</li> <li>rational numbers are combined.</li> <li>Apply the additive inverse property to subtraction problems and develop the argument that the</li> <li>distance between two points is the absolute value of the difference between their coordinates.</li> <li>Explain why a divisor cannot be zero and why division of integers results in a rational number.</li> </ul>	<p>7.NS.1 7.NS.2</p>			
	Week 2	1	<ul style="list-style-type: none"> <li>Model the multiplication and division of signed numbers using real-world contexts, such as taking multiple steps backwards.</li> <li>Convert a rational number to a decimal using long division and explain in oral or written language why the decimal is either a terminating or repeating decimal.</li> </ul>	7.NS.2			
	Week 3	1	<ul style="list-style-type: none"> <li>Apply properties of operations as strategies to add, subtract, multiply, and divide rational numbers.</li> </ul>	7.NS.2 7.NS.3		MATH MAP EXAM	
	Week 4	1	<ul style="list-style-type: none"> <li>Solve mathematical and real-world problems involving addition, subtraction, multiplication, and division of rational numbers.</li> </ul>	7.NS.3			
<b>Vocabulary:</b>							



Absolute value Additive inverse Difference Expression Integers Model Negative number Opposites Positive number Sum Whole number Divide  
Dividend Divisor Integers Multiply Negative number Operation Opposites Positive number Product Quotient Additive inverse Integers Native numbers  
Opposite Pattern Positive numbers Rational number Repeating decimals Terminating decimal Whole numbers

**Unit Questions:**

**7.NS.1**

- I CAN describe situations that have opposite quantities combining to make zero.
- I CAN place a number and its opposite value on a horizontal and vertical number line.
- I CAN demonstrate situations that have opposite quantities combining to make zero.
- I CAN give an example of additive inverses and use it to subtract rational numbers.
- I CAN add and subtract rational numbers in real-world situations.
- I CAN show that the distance between two points on a number line is the absolute value of their difference.
- I CAN demonstrate using real-world examples that absolute value is never negative.
- I CAN explain and apply the associative, commutative, identity, and inverse properties of addition using rational numbers.

**7.NS.2**

- I CAN multiply and divide rational numbers.
- I CAN use the distributive property with rational numbers.
- I CAN multiply and divide rational numbers in real-world context.
- I CAN understand that integers can only be divided by non-zero divisors.
- I CAN interpret quotients of rational numbers by describing real-world contexts.
- I CAN explain that a negative fraction must have either a negative numerator or negative denominator.
- I CAN explain and apply the associative, commutative, identity, and inverse properties of multiplication using rational numbers.
- I CAN convert a rational number to a decimal (by hand) and explain that the decimal form of a rational number either terminates in zero or repeats.
- I CAN recognize the difference between a repeating decimal and terminating decimal.

**7.NS.3**

- I CAN create and solve mathematical rational number problems.
- I CAN and solve real world rational number problems.

**Possible Resources:**

Opening Tasks, Pearson, Mathletics, Brain Pop, Matching Cards

DATE	WEEK	UNIT	STUDENT LEARNING OBJECTIVE	CORRESPONDING CCSS	SCF	ASSESSMENT	ASS DATE
	Week 5	3	<p><b>Ratios and Proportions</b></p> <ul style="list-style-type: none"> <li>Calculate and interpret unit rates of various quantities involving ratios of fractions that contain like and different units using real world examples such as speed and unit price.</li> </ul>	7.RP.1			
	Week 6	3	<ul style="list-style-type: none"> <li>Determine if a proportional relationship exists between two quantities e.g. by testing for equivalent ratios in a table or graph on the coordinate plane and observing whether the graph is a straight line through the origin.</li> <li>Identify the constant of proportionality (unit rate) from tables, graphs, equations, diagrams, and verbal descriptions.</li> </ul>	7.RP.2			
	Week 7	3	<ul style="list-style-type: none"> <li>Write equations to model proportional relationships in real world problems.</li> </ul>	7.RP.2		MID-TERM EXAM	
	Week 8	3	<ul style="list-style-type: none"> <li>Represent real world problems with proportions on a graph and describe how the graph can be used to explain the values of any point (x, y) on the graph including the points (0, 0) and (1, r), recognizing that r is the unit rate.</li> </ul>	7.RP.2			
	Week 9	3	<ul style="list-style-type: none"> <li>Solve multi-step ratio and percent problems using proportional relationships, including scale drawings of geometric figures, simple interest, tax, markups and markdowns, gratuities and commissions, and fees.</li> </ul>	7.RP.3, 7.G.1			
	Week 10						
	Week 11	3	<ul style="list-style-type: none"> <li>Use freehand, mechanical (i.e. ruler, protractor) and technological tools to draw geometric shapes with given conditions (e.g. scale factor), focusing on constructing triangles.</li> </ul>	7.G.2			
<b>Vocabulary:</b>							



Complex fraction Constant, Constant of Proportionality Conversion factor Percent Proportion Proportional relationship Rate, Rate of change Ratio Unit rates Proportion Percent Ratio Unit rate Percent decrease Percent increase Principal Simple interest

**Unit Questions:**

**7.RP.1**

- I CAN find the unit rate given a ratio of fractions in a variety of real-world situations.
- I CAN accurately identify unit rates.

**7.RP.2**

- I CAN identify that two quantities are in a proportional relationship.
- I CAN use a table to determine if two quantities are in a proportional relationship.
- I CAN recognize that two quantities are proportional if their ordered pairs form a straight line through the origin.
- I CAN determine the constant of proportionality (rate of change) given a table.
- I CAN determine the constant of proportionality (rate of change) given a graph.
- I CAN determine the constant of proportionality (rate of change) given a diagram.
- I CAN identify the constant of proportionality (rate of change) given an equation.
- I CAN determine the constant of proportionality (rate of change) given a verbal description.
- I CAN translate a real world situation into an equation to demonstrate proportionality.
- I CAN create a table to demonstrate proportionality.
- I CAN identify the unit rate as the y-coordinate when the x-coordinate is one (1) when given a graph
- I CAN identify the unit rate as the y-coordinate when the x-coordinate is one (1) when given a table.

**7.RP.3**

- I CAN convert a percent into a proportional relationship out of 100.
- I CAN convert a percent to a fraction or decimal when used in calculations.
- I CAN convert between fractions, decimals and percent.
- I CAN solve real-world multi-step ratio and percent problems.

**7.G.1**

- I CAN use proportions to find unknown lengths of geometric figures.
- I CAN use scale drawings to find areas of geometric figures.
- I CAN reproduce a scale drawing at a different scale.

**7.G.2**



- I CAN draw a triangle (freehand, with a ruler and protractor, and technology).
- I CAN identify the conditions that make a triangle unique.
- I CAN determine the uniqueness of a triangle based on given angle and/or side measurements.

**Possible Resources:**

Opening Tasks, Pearson, Mathletics, Brain Pop, Matching Cards