

Unit Title	Pacing	Standards with Key Concepts
<b>1. Operating with Rational Numbers (add/sub)</b>	4 weeks	<b>7.NS.1</b> Add and subtract rational numbers including number line diagrams: - describe situations modeled by additive inverse - understand $p + q$ as the number located distance $ q $ from $p$ . - understand $p - q = p + (-q)$ - apply properties of operations to deepen understanding of addition and subtraction <b>7.NS.3</b> -solve real world problems involving addition and subtraction of rational numbers
<b>Add &amp; Subtract with Rational Numbers Unit Task</b>	2 days	
<b>2. Operating with Rational Numbers (mult/div)</b>	3 weeks	<b>7.NS.2</b> Multiply and divide rational numbers: - multiply and divide with signed numbers - interpreting products and quotients by describing real-world contexts - apply properties of operations (commutative, associate, identity, inverse, <b>distributive</b> ) to deepen understanding of multiplication and division - convert rational number to a decimal <b>7.NS.3</b> - solve real world problems involving the four operations with rational numbers <b>7.EE.2</b> - rewriting an expression in different forms can shed light on the problem <b>7.EE.3</b> - solve multi-step real-life problems with positive and negative rational numbers in any form - use tools strategically - apply properties of operations - convert between forms - assess reasonableness using mental computation and estimation strategies
<b>Operations with Rational Numbers Unit Task</b>	2 days	
<b>3. Two and Three Dimensional Geometry</b>	4 weeks	<b>7.G.2</b> - draw shapes with given conditions if possible, focus on triangles <b>7.G.3</b> - describe plane sections of right rectangular prisms and right rectangular pyramids <b>7.G.4</b> - know formulas for area and circumference of a circle - informally derive the relationship between circumference and area of a circle <b>7.G.5</b> - write and solve simple equations for an unknown angle using facts about supplementary, complementary, vertical, and adjacent angles <b>7.G.6</b> - solve real-world problems involving area, volume, surface area of two- and three-dimensional

		objects
<b>Two and Three Dimensional Geometry Unit Task</b>	2 days	
<b>4. Proportional Relationships – part 1</b>	3 weeks	<b>7.RP.1</b> - compute unit rates associated with rational numbers <b>7.RP.2</b> Recognize and represent proportional relationships: - determine a proportional relationship using a table or graph - identify the constant of proportionality (unit rate) - represent proportional relationships by equations - interpret points on a graph represented by a proportional relationship
<b>Semester Project</b>	1 week	
<b>5. Proportional Relationships – part 2</b>	3 weeks	<b>7.RP.3</b> - use proportional relationships to solve multistep ratio and percent problems (simple interest, tax, percent increase and decrease, percent error) <b>7.G.1</b> - solve problems involving scale drawings of geometric figures
<b>Proportional Relationships (part 1 &amp; 2) Unit Task</b>	2 days	
<b>6. Algebraic Reasoning</b>	4 weeks	<b>7.EE.1</b> - use properties of operations to write equivalent expressions <b>7.EE.2</b> - understand that rewriting an expression in different forms can shed light on a problem <b>7.EE.4</b> - construct simple equations and inequalities to solve problems - solve word problems in the form $px + q = r$ and $p(x + q) = r$ - solve word problems in the form $px + q > r$ and $px + q < r$ and graph solutions

<b>Algebraic Reasoning Unit Task</b>	2 days	
<b>7. Inferences about Populations</b>	3 weeks	<p><b>7.SP.1</b> - understand that appropriate samples can produce valid statistical information about a population</p> <p><b>7.SP.2</b> - use data from a random sample(s) to draw inferences about a population</p> <p><b>7.SP.3</b> - assess data distribution and center - interpret measure of variability (mean absolute deviation)</p> <p><b>7.SP.4</b> - use measures of center and variability to draw inferences about two populations</p>
<b>Inferences about Populations Unit Task</b>	2 days	
<b>8. Probability</b>	3 weeks	<p><b>7.SP.5</b> - understand that the probability of a chance event is a number between 0 and 1</p> <p><b>7.SP.6</b> - approximate probability by collecting data and make predictions</p> <p><b>7.SP.7</b> - compare mathematical probability models to observed probabilities and explain discrepancies, use uniform and non-uniform models</p> <p><b>7.SP.8</b> - find probability of compound events using lists, tables, tree diagrams and simulations - interpret the fraction representation of probability - design and use simulations for compound events</p>
<b>Probability Unit Task</b>	2 days	
<b>Semester Project</b>	1 week	