

## 6<sup>th</sup> Grade Year at a Glance

	1 <sup>st</sup> Trimester	1 <sup>st</sup> Trimester	2 <sup>nd</sup> Trimester	2 <sup>nd</sup> Trimester	3 <sup>rd</sup> Trimester	3 <sup>rd</sup> Trimester
Big Idea	Historical Narratives	Embracing Heritage	Discovery	Figuring it Out	Characters	Dreaming Big
<b>Standards</b>	Statistical Measures: 6.SP.1 6.SP.2 6.SP.3 6.SP.5  Data Displays 6.SP.4 6.SP.5  Practice Standards	Numerical Expressions & Factors 6.NS.2 6.NS.4 6.EE.1  Integers & Coordinate Plane 6.NS.5 6.NS.6 6.NS.7 6.NS.8  Practice Standards	Multiplying and Dividing Fractions 6.NS.1  Operations with Decimals 6.NS.3  Practice Standards	Ratios and Rates 6.RP.1 6.RP.2 6.RP.3  Percentages 6.RP.3  Practice Standards	Algebraic Expressions and Properties 6.EE.2 6.EE.3 6.EE.4 6.EE.6  Equations and Inequalities 6.EE.5 6.EE.7 6.EE.8 6.EE.9  Practice Standards	Area of Polygons 6.G.1 6.G.3  Surface Area and Volume 6.G.2 6.G.4  Practice Standards
<b>Prioritized Vocabulary</b>	Analyze Conclude Sequence	Compare Contrast Summarize	Discover Evidence Calculate	Scale Evaluate Infer	Claim Source Characteristics	Bibliography Credibility Paraphrase
<b>Summary Math Concepts</b>	Statistical Measures Data Displays	Numerical Expressions & factors Integers & coordinate plan	Multiplying and Dividing Fractions Operations with Decimals	Ratios and Rates Percentages	Algebraic expressions and properties Equations and Inequalities	Area of Polygons Surface area and volume
<b>Writing Focus</b>	Narrative	Informational/ Expository	Argument	Informational/ Expository	Argument	Argument
<b>Math Concepts</b>	Intro to Statistics: Mean, Measures of Center Measures of Variation Histograms Shapes of Distribution Box and Whisker Plots Dot Plots	Whole Number operations Powers and Exponents Order of Operations Prime Factorization Greatest Common Factor Least Common Multiple Integers Comparing and Ordering Integers Fractions and Decimals on the	Multiplying Fractions Dividing Fractions and Mixed Numbers Adding and Subtracting Decimals Multiplying Decimals Dividing Decimals Adding and Subtracting Decimals Multiplying Decimals Dividing Decimals	Ratios Ratio Tables Rates Comparing and Graphing Ratios Converting Measures Finding Percentages Finding the Whole when given the part and the percent.	Algebraic Expressions Writing Expressions Properties of Addition and Multiplication The Distributive Property Writing Equations with 1 and 2 variables Addition and Subtraction equations Multiplications and Division Equations Writing and Graphing inequalities Solving Inequalities	Area of Parallelograms Area of Triangles Area of Trapezoids Polygons in the Coordinate Plane Three Dimensional Figures Surface Area of Prisms Surface Area of pyramids Volume of Rectangular Prisms

		Number Line Absolute Value The Coordinate Plane Reflecting Points on the Coordinate Plane				
<b>Science Concepts</b>	Heat Light Sound	Moon Phases Earth's Rotation	Earth's tilt Seasons	Components of Solar System Gravitational Force	Size & Distance of Solar Objects	Microorganisms
<b>English Language Arts Concepts</b>	Narrative Writing Citing Textual Evidence Determining a Theme Pronouns	Point of View Discussion	Compare & Contrast Use Evidence	Word Meaning Gathering & Interpreting Information Figurative Language	Master Discussions Presenting Claims	Determining a Central Idea Analyzing Text Structure Supporting Arguments with Evidence Conduct Research
<b>Social Studies Concepts</b>	Historical Skills & Geography Introduction to Civilizations: Mesopotamia	Characteristics of Civilizations Comparison of Civilizations	Transformation of Cultures World Religions Middle Ages & Renaissance	Process & Impact of Revolutions 1750-1914	Building Today's World WWI & WWII	Our World Today 1945-Today (Cold War, Human Rights, Middle East)
<b>PE &amp; Health Concepts</b>	Sportsmanship Physical Fitness Game Play	Understanding Emotions Resiliency & Stress	Substance Abuse Nutrition Consumer Health	Sportsmanship Physical Fitness Game Play	Body Image Hygiene HIV/AIDS	Sportsmanship Physical Fitness Game Play

*\* The first 6<sup>th</sup> grade unit is a flexible unit that introduces students to the concepts of statistical measures and data displays to allow students to record and graph their own data throughout the year, as well as be familiar with graphs in all content areas. Since students have not been explicitly taught operations with decimals and fractions students will need to use whole numbers for this unit. This unit can be revisited at the end of the year to include operations with decimals and fractions.*

6 <sup>th</sup> Grade Statistical Measures and Data Displays Unit 1 Theme: Historical Narratives			
Math Concepts	Prioritized Vocabulary	Cross Curricular Connections	
Statistical Measures: <ul style="list-style-type: none"> <li>• Mean</li> <li>• Measures of Center</li> <li>• Measures of Variation</li> </ul> Data Displays <ul style="list-style-type: none"> <li>• Histograms</li> <li>• Shapes of Distribution</li> <li>• Box and Whisker Plots</li> <li>• Dot Plots</li> </ul> Practice Standards	<ul style="list-style-type: none"> <li>• Analyze</li> <li>• Conclude</li> <li>• Sequence</li> </ul>		
<b>6.SP.1 Standard: Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers. For example, "How old am I?" is not a statistical question, but "How old are the students in my school?" is a statistical question because one anticipates variability in students' ages.</b>			
Student Learning Targets:	<ul style="list-style-type: none"> <li>• I can identify and write statistical questions.</li> </ul>		
Key Vocabulary:	<ul style="list-style-type: none"> <li>• Data</li> <li>• Statistics</li> <li>• Statistical Question</li> <li>• Statistical Variability</li> <li>• Bias</li> <li>• Fair Questions</li> </ul>		
Curriculum Supports:	enVision 2011: <ul style="list-style-type: none"> <li>• CC 19-5 A</li> </ul>	enVision 2012: <ul style="list-style-type: none"> <li>• Topic 19-1</li> </ul>	Big Ideas 2014: <ul style="list-style-type: none"> <li>• Section 9.1</li> </ul>

Performance Task(s):	<ul style="list-style-type: none"> <li>• Big Ideas (2014): 6.SP.1 Softball</li> </ul>		
Skill-Based Task:	<ul style="list-style-type: none"> <li>• Provide students with various questions and have them determine if they are statistical or non-statistical questions. For example which of the following is a statistical question: Do you exercise? or How many hours per week on average do students at our middle school exercise?</li> </ul>		
<b>6.SP.2 Standard: Understand that a set of data collected to answer a statistical question has a distribution which can be described by its center, spread, and overall shape.</b>			
Student Learning Targets:	<ul style="list-style-type: none"> <li>• I can describe a set of data using its center (mode, median, or mean), spread (range) and its shape.</li> </ul>		
Key Vocabulary	<ul style="list-style-type: none"> <li>• Center</li> <li>• Distribution</li> <li>• Shape</li> <li>• Spread</li> </ul>		
Curriculum Supports:	enVision 2011: <ul style="list-style-type: none"> <li>• CC 19-9 A</li> <li>• CC 19-5b</li> </ul>	enVision 2012: <ul style="list-style-type: none"> <li>• Topic 19-9</li> <li>• Topic 19-2</li> </ul>	Big Ideas 2014: <ul style="list-style-type: none"> <li>• Section 9.1</li> <li>• Section 10.3</li> </ul>
Performance Task(s):	<ul style="list-style-type: none"> <li>• Big Ideas (2014): 6.SP.2 Movies</li> <li>• Provide a box score from a college or professional basketball game, have the students pick out the points scored by each player. The students will find the center of the data (in this case, let's use the median), and the spread of the data. Have the students graph the data and describe the overall shape. Then have the students answer the following questions:               <ul style="list-style-type: none"> <li>• All players who don't score at or above the median points scored have to ride a stationary bicycle for 20 minutes. List the players who have to ride the bicycle.</li> <li>• The coach is trying to get the team to play more as a team. He is using the spread of the data as a way to determine if they are playing as a team. How might the coach use the spread to accomplish his goal?</li> </ul> </li> </ul>		
Skill-Based Task:	<ul style="list-style-type: none"> <li>• Have students identify the center, spread, and overall shape of data graphed by teacher.</li> </ul>		
<b>6.SP.3 Standard: Recognize that a measure of center for a numerical data set summarizes all of its values with a single number, while a measure of variation describes how its values vary with a single number.</b>			
Student Learning	<ul style="list-style-type: none"> <li>• I can understand that a set of numerical data has a measure of center (median and/or mean) that</li> </ul>		

Targets:	<p>summarizes all of its values with a single number.</p> <ul style="list-style-type: none"> <li>I can understand that in a set of numerical data, the measure of variation describes how its values vary with a single number.</li> </ul>		
Key Vocabulary	<ul style="list-style-type: none"> <li>Center</li> <li>Mean</li> <li>Median</li> <li>Mode</li> <li>Range</li> <li>Variability</li> <li>Interquartile Range</li> <li>Mean Absolute Deviation</li> </ul>		
Curriculum Supports:	<p>enVision 2011:</p> <ul style="list-style-type: none"> <li>CC 19-5 C</li> <li>CC 19-5 d</li> <li>CC 19-8b</li> </ul>	<p>enVision 2012:</p> <ul style="list-style-type: none"> <li>Topic 19-3</li> <li>Topic 19-4</li> <li>Topic 19-7</li> </ul>	<p>Big Ideas 2014:</p> <ul style="list-style-type: none"> <li>Section 9.2</li> <li>Section 9.3</li> <li>Section 9.4</li> <li>Section 9.5</li> </ul>
Performance Task(s):	<ul style="list-style-type: none"> <li>Big Ideas (2014): 6.SP.3 Olympic Medals</li> <li>Have students create statistical questions that have meaning to them (e.g. how much allowance they get, how far they walk or ride to school) in groups. Students survey students in other grade levels and/or classes to gather data, and they then graph the data. Have them then analyze and summarize the data using the vocabulary in this lesson.</li> </ul>		
Skill-Based Task	<ul style="list-style-type: none"> <li>Identify the mean, median, mode and range of a set of data.</li> <li>Find the Mean Absolute Deviation of the following data set that represents the size of 9 families: 3, 2, 4, 2, 9, 8, 2, 11, 4 (the solution is 5 )</li> </ul>		
<p>6.SP.5* Standard (a-c): Summarize numerical data sets in relation to their context, such as by:</p> <ol style="list-style-type: none"> <li>Reporting the number of observations.</li> <li>Describing the nature of the attribute under investigation, including how it was measured and its units of measurement.</li> <li>Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered.</li> <li>Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the</li> </ol>			

<p style="text-align: center;">data were gathered. * <i>This standard is taught throughout the entire statistics unit.</i></p>			
Student Learning Targets:	<ul style="list-style-type: none"> <li>• I can summarize sets of numerical data that are different.</li> <li>• I can summarize data by stating the number of observations.</li> <li>• I can summarize data by describing the characteristics of what is being investigated, including how it was measured.</li> <li>• I can summarize data by giving numerical measures of center and variability</li> <li>• I can summarize data by describing the overall pattern of the data and noticing unusual deviations from the overall pattern.</li> <li>• I can summarize data by explaining how the distribution of the data on a graph determines its measure of center (median and/or mean).</li> </ul>		
Key Vocabulary	<ul style="list-style-type: none"> <li>• Data set</li> <li>• Observation</li> <li>• Sample Size</li> <li>• n-size</li> <li>• Distribution</li> </ul>		
Curriculum Supports:	<p>enVision 2011:</p> <ul style="list-style-type: none"> <li>• Topic 19</li> </ul>	<p>enVision 2012:</p> <ul style="list-style-type: none"> <li>• Topic 19</li> </ul>	<p>Big Ideas 2014:</p> <ul style="list-style-type: none"> <li>• Chapter 9</li> <li>• Chapter 10</li> </ul>
Performance Task(s):	<ul style="list-style-type: none"> <li>• Big Ideas (2014): Speed 6.SP.5</li> <li>• Have students use data found in newspaper or other media to interpret total number of observations in that data set. Have them explain why the number of observations is important for that set of data.</li> </ul>		
Skill-Based Task:	<ul style="list-style-type: none"> <li>• Given a set of data determine the best measure of central tendency and be able to justify answer.</li> <li>• Have students find the total number of observations given different plots.</li> </ul>		
<p>6.SP.4 Standard: Display numerical data in plots on a number line, including dot plots, histograms, and box plots.</p>			
Student Learning Targets:	<ul style="list-style-type: none"> <li>• I can show numerical data on a number line.</li> <li>• I can display data with a dot plot.</li> <li>• I can display data with a box plot.</li> <li>• I can display data with a histogram.</li> </ul>		
Key Vocabulary	<ul style="list-style-type: none"> <li>• First Quartile</li> <li>• Second Quartile</li> <li>• Third Quartile</li> </ul>		

	<ul style="list-style-type: none"> <li>• Fourth Quartile</li> <li>• Box Plot</li> <li>• Distribution</li> <li>• Dot Plot</li> <li>• Histogram</li> <li>• Interquartile Range</li> <li>• Upper Quartile</li> <li>• Lower Quartile</li> <li>• Median</li> <li>• Upper End Point</li> <li>• Lower End Point</li> </ul>		
Curriculum Supports:	enVision 2011: <ul style="list-style-type: none"> <li>• CC 19-8 A</li> <li>• CC 19-6</li> </ul>	enVision 2012: <ul style="list-style-type: none"> <li>• Topic 19-5</li> <li>• Topic 19-6</li> </ul>	Big Ideas 2014: <ul style="list-style-type: none"> <li>• Section 9.1</li> <li>• Section 10.1</li> <li>• Section 10.2</li> <li>• Section 10.4</li> </ul>
Performance Task(s):	<ul style="list-style-type: none"> <li>• Big Ideas (2014): 6.SP.4 Game Show</li> <li>• Have students count the number of steps they take to get to school. If they ride in a car or bus have them count the steps they take to get to the vehicle and then into school. Have the students graph the data using a dot plot, histogram, and box plot.</li> </ul>		
Skill-Based Task:	<ul style="list-style-type: none"> <li>• Given a data set, create the following: Dot Plot, Histogram, and Box Plot.</li> </ul>		
Additional Resources			
Science and Technical Subject Literacy Standards		Literacy Implementation Ideas	
Reading	<p><b>6.RST.3</b> - Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.</p> <p><b>6.RST.4</b> - Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to 6<sup>th</sup> grades topics.</p> <p><b>6.RST.7</b> - Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).</p>		

Writing	<p><b>6.WHST.2</b> - Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes.</p> <p><b>6.WHST.3</b> - Provide a concluding statement or section that follows from and supports the information or explanation presented.</p> <p><b>6.WHST.7</b> - Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.</p>	
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6 <sup>th</sup> Grade Numerical Expressions, Factors, Integers & Coordinate Plane Unit 2 Theme: Embracing Heritage			
Math Concepts	Prioritized Vocabulary	Cross Curricular Connections	
Whole Number operations Powers and Exponents Order of Operations Prime Factorization Greatest Common Factor Least Common Multiple Integers Comparing and Ordering Integers Fractions and Decimals on the Number Line Absolute Value The Coordinate Plane Reflecting Points on the Coordinate Plane Practice Standards	<ul style="list-style-type: none"> <li>Compare</li> <li>Contrast</li> <li>Summarize</li> </ul>		
<b>6.NS.2 Standard: Fluently divide multi-digit numbers using the standard algorithm.</b>			
Student Learning Targets:	<ul style="list-style-type: none"> <li>I can divide multi-digit numbers.</li> </ul>		
Key Vocabulary:	<ul style="list-style-type: none"> <li>Dividend</li> <li>Division Notation</li> <li>Divisor</li> <li>Quotient</li> <li>Remainder</li> <li>Various Division Symbols such as / and ÷</li> </ul>		
.Curriculum Supports:	enVision 2011: <ul style="list-style-type: none"> <li>CC 3-5 a</li> <li>Topic 3-5</li> </ul>	enVision 2012: <ul style="list-style-type: none"> <li>Topic 305</li> </ul>	Big Ideas 2014: <ul style="list-style-type: none"> <li>Section 1.1</li> </ul>
Performance Task(s):	<ul style="list-style-type: none"> <li>Big Ideas (2014): 6.NS.2 Festival Trees</li> <li>I spent \$504 on 28 tickets for a concert. How much did I spend on each ticket? Justify your reasoning.</li> </ul>		

Skill-Based Task:	<ul style="list-style-type: none"> <li>• 248 divided by 18</li> </ul>		
<b>6.NS.4 Standard: Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12. Use the distributive property to express a sum of two whole numbers 1-100 with a common factor as a multiple of a sum of two whole numbers with no common factor. <i>For example, express <math>36 + 8</math> as <math>4(9 + 2)</math>...</i></b>			
Student Learning Targets:	<ul style="list-style-type: none"> <li>• I can find the greatest common factor of two whole numbers.</li> <li>• I can find the least common multiple of two whole numbers.</li> <li>• I can use the distributive property to show the sum of two whole numbers 1-100 in different ways. (Ex: show <math>36 + 8</math> as <math>4(9+2)</math>)</li> </ul>		
Key Vocabulary	<ul style="list-style-type: none"> <li>• Distributive Property</li> <li>• Factor</li> <li>• Greatest Common Factor</li> <li>• Least Common Multiple</li> <li>• Multiple</li> <li>• Factorization</li> </ul>		
Curriculum Supports:	enVision 2011: <ul style="list-style-type: none"> <li>• Topic 5-3</li> <li>• Topic 7-2</li> <li>• Topic 2-4</li> </ul>	enVision 2012: <ul style="list-style-type: none"> <li>• Topic 5-3</li> <li>• Topic 7-2</li> <li>• Topic 2-4</li> </ul>	Big Ideas 2014: <ul style="list-style-type: none"> <li>• Section 1.4</li> <li>• Section 1.5</li> <li>• Section 1.6</li> <li>• Extension 1.6</li> <li>• Section 3.4</li> <li>• Extension 3.4</li> </ul>
Performance Task(s):	<ul style="list-style-type: none"> <li>• Big Ideas (2014): 6.NS.4 Fruits</li> <li>• Hot dogs come in packs of 8. Buns come in packs of 12. How many packs of hot dogs and bags of buns would you have to buy to have an equal number of hot dogs and buns?</li> <li>• You need to make gift bags for a party with the same number of balloons and candy in each bag. One package of candy has 24 pieces. One package of balloons has 20 balloons. You need to use all the candy and all the balloons. What is the greatest number of gift bags that you can make containing an equal number of items?</li> </ul>		
Skill-Based Task:	<ul style="list-style-type: none"> <li>• Find the greatest common factor of 24 and 60.</li> <li>• Find the least common multiple of 6 and 10.</li> <li>• Use the distributive property to show <math>15 + 75</math>.</li> </ul>		

<b>6.EE.1 Standard: Write and evaluate numerical expressions involving whole-number exponents.</b>			
Student Learning Targets:	<ul style="list-style-type: none"> <li>I can write and understand numerical expressions involving whole number exponents.</li> <li>I can use my knowledge of the order of operations to evaluate and create equivalent expressions.</li> </ul>		
Key Vocabulary	<ul style="list-style-type: none"> <li>^</li> <li>Base Number</li> <li>Expressions</li> <li>Exponents</li> <li>Power</li> <li>Superscripted Numbers</li> </ul>		
Curriculum Supports:	enVision 2011: <ul style="list-style-type: none"> <li>Topic 1-3</li> </ul>	enVision 2012: <ul style="list-style-type: none"> <li>Topic 1-3</li> </ul>	Big Ideas 2014: <ul style="list-style-type: none"> <li>Section 1.2</li> <li>Section 1.3</li> </ul>
Performance Task(s):	<ul style="list-style-type: none"> <li>Big Ideas (2014): 6.EE.1 Band Competition</li> <li>Certain biological cells quadruple each hour. Start with one cell at 2:00 and find out how many cells there will be by 5:00. Create a diagram to represent the cell growth. Include an equation using exponential notation.</li> </ul>		
Skill-Based Task	<ul style="list-style-type: none"> <li>Evaluate powers, for example: <math>3^2</math></li> <li>Write five cubed as a numerical expression.</li> </ul>		
<b>6.NS.5 Standard: Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., temperature above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge); use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation.</b>			
Student Learning Targets:	<ul style="list-style-type: none"> <li>I can understand that positive and negative numbers are used to describe amounts having opposite values.</li> <li>I can use positive and negative numbers to show amounts in real-world situations and explain what the number 0 means in those situations.</li> </ul>		
Key Vocabulary	<ul style="list-style-type: none"> <li>Integer</li> <li>Negative</li> <li>Positive</li> <li>Rational</li> <li>Zero</li> </ul>		

Curriculum Supports:	enVision 2011: <ul style="list-style-type: none"> <li>• Topic 10-1</li> </ul>	enVision 2012: <ul style="list-style-type: none"> <li>• Topic 10-1</li> </ul>	Big Ideas 2014: <ul style="list-style-type: none"> <li>• Section 6.1</li> </ul>
Performance Task:	<ul style="list-style-type: none"> <li>• Big Ideas (2014): 6.NS.5 Lakes of North America</li> <li>• Create situations in which integers have opposite values and explain what zero means in this situation.</li> </ul>		
Skill-Based Task:	<ul style="list-style-type: none"> <li>• Joe’s football team has a loss of 5 yards on the first down. Write an integer to represent this situation.</li> </ul>		
<p><b>6.NS.6 Standard: 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.</b></p> <p><b>a) Recognize opposite signs of numbers as indicating locations on opposite sides of 0 on the number line; recognize that the opposite of the opposite of a number is the number itself, e.g., <math>-(-3) = 3</math>, and that 0 is its own opposite.</b></p> <p><b>b) Understand signs of numbers in ordered pairs as indicating locations in quadrants of the coordinate plane; recognize that when two ordered pairs differ only by signs, the locations of the points are related by reflections across one or both axes.</b></p> <p><b>c) Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position pairs of integers and other rational numbers on a coordinate plane.</b></p>			
Student Learning Targets:	<ul style="list-style-type: none"> <li>• I can understand that a rational number is a point on a number line.</li> <li>• I can extend number line diagrams to show positive and negative numbers on the line and in the plane</li> <li>• I can recognize opposite signs of numbers as indicating places on opposite sides of 0 on the number line.</li> <li>• I can understand signs of numbers in ordered pairs as indicating locations in quadrants of the coordinate plane. (Ex: when two ordered pairs differ only by signs, the locations appear to be reflections of each other on the coordinate plane.)</li> <li>• I can place integers and other numbers on a number line diagram.</li> <li>• I can place ordered pairs on a coordinate plane.</li> </ul>		
Key Vocabulary	<ul style="list-style-type: none"> <li>• Integer</li> <li>• Opposite</li> <li>• Rational Number</li> <li>• Point</li> </ul>		

Curriculum Supports:	enVision 2011: <ul style="list-style-type: none"> <li>• Topic 10-9</li> <li>• Topic 10-2</li> <li>• Topic 10-3</li> </ul>	enVision 2012: <ul style="list-style-type: none"> <li>• Topic 10-8</li> <li>• Topic 10-9</li> <li>• Topic 10-2</li> <li>• Topic 10-3</li> </ul>	Big Ideas 2014: <ul style="list-style-type: none"> <li>• Section 9.1</li> <li>• Section 10.1</li> <li>• Section 10.2</li> <li>• Section 10.4</li> </ul>
Performance Task:	<ul style="list-style-type: none"> <li>• Big Ideas (2014): 6.NS.6 Temperature</li> <li>• A town was laid out using a coordinate plane. On the city plans, the library is at (3, 2). Which of the following locations is a reflection across the x-axis of where the library is located? Prove your answer is correct using two different methods.: School (-3, -2) Gas Station (-3, 2) Post Office (3, -2).</li> </ul>		
Skill-Based Task:	<ul style="list-style-type: none"> <li>• If you had a point graphed at (5, -3), what would be one ordered pair that is a reflection of the point? Students may use a coordinate plane to find a solution.</li> <li>• Plot the following ordered pairs: (3, 2), (-4, 5), (-8, -3), (4, -6), (21/2, -5), (-9.75, 0) (Note: Approximation is appropriate.)</li> <li>• Create a graph of several points and have students write the ordered pair for each point.</li> </ul>		
<p><b>6.NS.7 Standard: Understand ordering and absolute value of rational numbers.</b></p> <p><b>a) Interpret statements of inequality as statements about the relative position of two numbers on a number line diagram. For example, interpret <math>-3 &gt; -7</math> as a statement that <math>-3</math> is located to the right of <math>-7</math> on a number line oriented from left to right.</b></p> <p><b>b) Write, interpret, and explain statements of order for rational numbers in real-world contexts.</b></p> <p><b>c) Understand the absolute value of a rational number as its distance from 0 on the number line; interpret absolute value as magnitude for a positive or negative quantity in a real-world situation.</b></p> <p><b>d) Distinguish comparisons of absolute value from statements about order.</b></p>			
Student Learning Targets:	<ul style="list-style-type: none"> <li>• I can understand the absolute value as the number's distance from 0 on the number line.</li> <li>• I can understand absolute value of rational numbers.</li> <li>• I can write, understand and explain what rational numbers means in real-world situations.</li> <li>• I can understand absolute values as they apply to real-world situations. (Ex: for an account balance of -30 dollars, write <math>(-30) = 30</math> to describe the size of the debt in dollars.)</li> <li>• I can tell the difference between comparing absolute values and ordering positive and negative numbers.</li> </ul>		
Key Vocabulary	<ul style="list-style-type: none"> <li>• Inequality</li> <li>• Rational Numbers</li> </ul>		

	<ul style="list-style-type: none"> <li>• Absolute Value</li> <li>• Decrease</li> <li>• Increase</li> </ul>		
Curriculum Supports:	enVision 2011: <ul style="list-style-type: none"> <li>• CC 10-2 A</li> </ul>	enVision 2012: <ul style="list-style-type: none"> <li>• Topic 10-8</li> </ul>	Big Ideas 2014: <ul style="list-style-type: none"> <li>• Section 6.4</li> </ul>
Performance Task:	<ul style="list-style-type: none"> <li>• Big Ideas (2014): 6.NS.7 Temperature on Planets</li> <li>• On Tuesday the temperature was <math>-7^{\circ}\text{F}</math> and on Wednesday the temperature was <math>-5^{\circ}\text{F}</math>. Which day was colder? Write the inequality and show it on a number line. Explain how you know your answer is correct.</li> <li>• A scuba diver is 30 ft. below sea level and a submarine is 75 ft. below sea level. Jim thinks the inequality for this situation should be <math>-30 \text{ ft. below sea level} &gt; -75 \text{ ft. below sea level}</math>. Sally thinks the inequality should be <math>-30 \text{ ft. below sea level} &lt; -75 \text{ ft. below sea level}</math>. Who is correct? Why?</li> <li>• A whale swims 40 ft. below sea level. Express the whale’s location as an integer and tell how many feet below the surface the whale is swimming. Explain your answers for both parts of the problem.</li> <li>• A mother dolphin is 150.25 meters below sea level. Her calf is 45 meters below sea level. Which dolphin is farthest from the surface? A mother whale is at 35 meters below the surface and her calf is at the surface. How far does the calf have to swim to get to its mother? Which statement deals with absolute value? Which statement deals with ordering? Justify your answer.</li> </ul>		
Skill-Based Task:	<ul style="list-style-type: none"> <li>• Compare rational numbers using symbols of inequality.</li> <li>• It is <math>-20^{\circ}\text{F}</math> in Juno, Alaska and <math>-5^{\circ}\text{F}</math> in Salt Lake City, Utah. Which city has the lowest temperature?</li> <li>• <math> -5  =</math> If Billy owes Susie \$5, express Billy’s debt as an integer.</li> <li>• You are \$35 dollars in debt. Write your debt using mathematical symbols. How much do you need to earn to be out of debt?</li> </ul>		
<b>6.NS.8 Standard: Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane. Include use of coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate.</b>			
Student Learning Targets:	<ul style="list-style-type: none"> <li>• I can graph in all four quadrants of the coordinate plane to help me solve real world and mathematical problems.</li> <li>• I can determine the distance between points in the same first coordinate or the same second coordinate.</li> </ul>		
Key Vocabulary	<ul style="list-style-type: none"> <li>• Coordinate Plane</li> <li>• Absolute Value</li> </ul>		

	<ul style="list-style-type: none"> <li>• Coordinate</li> <li>• Ordered Pair</li> <li>• Point</li> <li>• Quadrant</li> <li>• Reflection</li> <li>• x-axis</li> <li>• y-axis</li> </ul>		
Curriculum Supports:	enVision 2011: <ul style="list-style-type: none"> <li>• CC 10-10A</li> </ul>	enVision 2012: <ul style="list-style-type: none"> <li>• Topic 10-9</li> <li>• Topic 10-10</li> </ul>	Big Ideas 2014: <ul style="list-style-type: none"> <li>• Section 6.5</li> <li>• Extension 6.5</li> </ul>
Performance Task:	<ul style="list-style-type: none"> <li>• Big Ideas (2014): 6.NS.8 Pain Ball</li> <li>• Bill’s house is at (-4, 6), the library is at (-4, -2) and the Bakery is at (3, -2). What is the distance between Bill’s house and the library? The library and the bakery? Show two different methods to find the difference.</li> </ul>		
Skill-Based Task:	<ul style="list-style-type: none"> <li>• What is the distance between (-8, 7) and (-8, -2)?</li> </ul>		
<b>Additional Resources</b>			
<b>Science and Technical Subject Literacy Standards</b>		<b>Literacy Implementation Ideas</b>	
Reading	<b>6.RST.3</b> - Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. <b>6.RST.4</b> - Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to 6 <sup>th</sup> <i>grades topics</i> . <b>6.RST.7</b> - Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).		
Writing	<b>6.WHST.2</b> - Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes. <b>6.WHST.3</b> - Provide a concluding statement or section that follows		

	<p>from and supports the information or explanation presented.  <b>6.WHST.7</b> - Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.</p>	

<b>6<sup>th</sup> Grade</b> <b>Dividing Fractions &amp; Operations with Decimals</b> <b>Unit 3 Theme: Discovery</b>			
Math Concept	Prioritized Vocabulary	Cross Curricular Connections	
Multiplying Fractions (review of 5 <sup>th</sup> grade) Dividing Fractions and Mixed Numbers Adding and Subtracting Decimals Multiplying Decimals Dividing Decimals Adding and Subtracting Decimals	<ul style="list-style-type: none"> <li>Discover</li> <li>Evidence</li> <li>Calculate</li> </ul>		
<b>6.NS.1 Standard:</b> Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem.			
Student Learning Targets:	<ul style="list-style-type: none"> <li>I can divide two fractions.</li> <li>I can solve word problems involving the division of fractions by fractions.</li> <li>I can model division fractions concretely (manipulatives), visually (diagrams), and abstractly (equations).</li> </ul>		
Key Vocabulary:	<ul style="list-style-type: none"> <li>Division</li> <li>Reciprocal</li> <li>Quotient</li> <li>Inverse Operation</li> </ul>		
Curriculum Supports:	enVision 2011: <ul style="list-style-type: none"> <li>Topic 9-1</li> <li>Topic 9-2</li> <li>Topic 9-3</li> <li>Topic 9-5</li> </ul>	enVision 2012: <ul style="list-style-type: none"> <li>Topic 9-1</li> <li>Topic 9-2</li> <li>Topic 9-3</li> <li>Topic 9-5</li> </ul>	Big Ideas 2014: <ul style="list-style-type: none"> <li>Section 2.1</li> <li>Section 2.2</li> <li>Section 2.3</li> </ul>



Performance Task(s):	<ul style="list-style-type: none"> <li>• Big Ideas (2014): 6.NS.1 Amusement Park</li> <li>• You have <math>\frac{5}{8}</math> pound of Skittles. You want to give your friends <math>\frac{1}{4}</math> lb. each. How many friends can you give Skittles to? Explain your answer.</li> <li>• You have a <math>\frac{3}{4}</math>-acre lot. You want to divide it into <math>\frac{3}{8}</math>-acre lots. How many lots will you have? Draw a diagram to justify your solution.</li> <li>• You have a <math>\frac{3}{4}</math>-acre lot. You want to divide it into 2 sections. How many acres in each section will you have? Draw a diagram to justify your solution.</li> <li>• How wide is a rectangular strip of land with length <math>\frac{3}{4}</math> mi. and area <math>\frac{1}{2}</math> square mi.?</li> </ul>		
Skill-Based Task:	<ul style="list-style-type: none"> <li>• Use representations to show that <math>\frac{1}{4}</math> divided by <math>\frac{1}{2}</math> is <math>\frac{1}{2}</math>, that <math>\frac{2}{3}</math> divided by <math>\frac{2}{5}</math> is <math>\frac{5}{3}</math>, that <math>\frac{2}{3}</math> divided by <math>\frac{3}{4}</math> is <math>\frac{8}{9}</math>, and that <math>1\frac{1}{2}</math> divided by <math>\frac{6}{4}</math> is 1.</li> </ul>		
<b>6.NS.3 Standard:</b> Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.			
Student Learning Targets:	<ul style="list-style-type: none"> <li>• I can add multi-digit numbers involving decimals.</li> <li>• I can subtract multi-digit numbers involving decimals.</li> <li>• I can multiply multi-digit numbers involving decimals.</li> <li>• I can divide multi-digit numbers involving decimals.</li> </ul>		
Key Vocabulary	<ul style="list-style-type: none"> <li>• Addend</li> <li>• Sum</li> <li>• Difference</li> <li>• Factor</li> <li>• Product</li> <li>• Divisor</li> <li>• Dividend</li> <li>• Quotient</li> <li>• Remainder</li> </ul>		
Curriculum Supports:	enVision 2011: <ul style="list-style-type: none"> <li>• Topic 3-2</li> <li>• Topic 3-4</li> <li>• Topic 3-6</li> <li>• Topic 3-7</li> </ul>	enVision 2012: <ul style="list-style-type: none"> <li>• Topic 3-2</li> <li>• Topic 3-4</li> <li>• Topic 3-6</li> <li>• Topic 3-7</li> </ul>	Big Ideas 2014: <ul style="list-style-type: none"> <li>• Section 2.4</li> <li>• Section 2.5</li> <li>• Section 2.6</li> </ul>
Performance Task:	<ul style="list-style-type: none"> <li>• Big Ideas (2014): 6.NS.3 Gold</li> <li>• The school had a bake sale and raised \$75.55. If each cookie cost \$0.05, how many cookies were sold?</li> </ul>		

	Explain how you got your answer.	
Skill-Based Task:	<ul style="list-style-type: none"> <li>• <math>242.134 + 308.02</math></li> <li>• <math>38.9 - 14.334</math></li> <li>• <math>11.82 \times 2.81</math></li> <li>• <math>341.8 \div 1.2</math></li> </ul>	
Additional Resources		
Science and Technical Subject Literacy Standards		
Reading	<p><b>6.RST.3</b> - Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.</p> <p><b>6.RST.4</b> - Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to 6<sup>th</sup> grades topics.</p> <p><b>6.RST.7</b> - Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).</p>	Literacy Implementation Ideas
Writing	<p><b>6.WHST.2</b> - Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes.</p> <p><b>6.WHST.3</b> - Provide a concluding statement or section that follows from and supports the information or explanation presented.</p> <p><b>6.WHST.7</b> - Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.</p>	

6 <sup>th</sup> Grade Ratios, Rates & Percentages Unit 4 Theme: Figuring it Out			
Math Concepts	Prioritized Vocabulary	Cross Curricular Connections	
Ratios & Rates Percentages Practice Standards	<ul style="list-style-type: none"> <li>Scale</li> <li>Evaluate</li> <li>Infer</li> </ul>		
<b>6.RP.1 Standard:</b> Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities.			
Student Learning Targets:	<ul style="list-style-type: none"> <li>I can use different notations to represent a ratio (1:3, 1 to 3, 1/3)</li> <li>I can understand ratio relationships between two quantities.</li> </ul>		
Key Vocabulary:	<ul style="list-style-type: none"> <li>Ratio</li> <li>Terms</li> <li>Symbols (:, /)</li> </ul>		
Curriculum Supports:	enVision 2011: <ul style="list-style-type: none"> <li>Topic 12-1</li> </ul>	enVision 2012: <ul style="list-style-type: none"> <li>Topic 12-1</li> </ul>	Big Ideas 2014: <ul style="list-style-type: none"> <li>Section 5.1</li> <li>Section 5.2</li> <li>Section 5.4</li> </ul>
Performance Task(s):	<ul style="list-style-type: none"> <li>Big Ideas (2014): 6.RP.1 Ships</li> <li>The newspaper reported, “For every vote candidate A received, candidate B received three votes.” Describe possible election results using at least three different ratios. Explain your answer.</li> </ul>		
Skill-Based Task:	<ul style="list-style-type: none"> <li>There are four dogs and three cats. What is the ratio of dogs to cats and cats to dogs?</li> </ul>		
<b>6.RP.2 Standard:</b> Understand the concept of a unit rate $a/b$ associated with a ratio $a:b$ with $b \neq 0$ , and use rate language in the context of a ratio relationship.			
Student Learning Targets:	<ul style="list-style-type: none"> <li>I can understand that a rate is a special ratio that compares two quantities with different units of measure.</li> <li>I can find the unit rate.</li> <li>I can use rate language to describe rates (per, each, or the @ symbol)</li> </ul>		
Key Vocabulary	<ul style="list-style-type: none"> <li>Rate</li> <li>Unit Rate</li> <li>Equivalent Ratio</li> <li>Ratio</li> <li>Rate Language: Per (for), each, @</li> </ul>		

Curriculum Supports:	<p>enVision 2011:</p> <ul style="list-style-type: none"> <li>• Topic 12-3</li> <li>• Topic 13-2</li> </ul>	<p>enVision 2012:</p> <ul style="list-style-type: none"> <li>• Topic 12-3</li> <li>• Topic 13-2</li> </ul>	<p>Big Ideas 2014:</p> <ul style="list-style-type: none"> <li>• Section 5.3</li> <li>• Section 5.4</li> </ul>
Performance Task(s):	<ul style="list-style-type: none"> <li>• Big Ideas (2014): 6.RP.2 Factory Production</li> <li>• Is the following example a ratio or rate? (60 heartbeats per minute) Explain your answer.</li> <li>• Give a real-life example of a unit rate and justify your answer.</li> </ul>		
Skill-Based Task:	<ul style="list-style-type: none"> <li>• Given examples identify the difference between a ratio and a rate.</li> </ul>		
<p><b>6.RP.3 Standard:</b> Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations.</p> <ul style="list-style-type: none"> <li>a. Make tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and plot the pairs of values on the coordinate plane. Use tables to compare ratios.</li> <li>b. Solve unit rate problems including those involving unit pricing and constant speed.</li> <li>c. Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means 30/100 times the quantity); solve problems involving finding the whole, given a part and the percent.</li> <li>d. Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities.</li> </ul>			
Student Learning Targets:	<ul style="list-style-type: none"> <li>a.) I can create a tables of equivalent ratios and use it to: <ul style="list-style-type: none"> <li>• find missing values in the tables,</li> <li>• plot those values on a coordinate plane</li> <li>• use the tables to compare ratios</li> </ul> </li> <li>b.) I can solve real world problems using unit rates.</li> <li>c.) I can find a percent of a quantity as a rate per hundred. I can find the percent of a number using rate methods. I can solve problems involving finding the whole if I am given a part and the percent.</li> <li>d.) I can convert customary units using ratios. I can convert metric units by multiplying and dividing.</li> </ul>		
Key Vocabulary	<ul style="list-style-type: none"> <li>• Coordinate Plane</li> <li>• Value Table</li> <li>• Table of Equivalent Ratios</li> <li>• Equivalent Ratios Notation (<math>\frac{a}{b} = \frac{c}{d}</math>) or <math>a</math> is to <math>b</math> as <math>c</math> is to <math>d</math></li> <li>• Ratio</li> <li>• Unit Rate</li> <li>• Percent</li> </ul>		

	<ul style="list-style-type: none"> <li>• % symbol</li> <li>• Convert</li> <li>• <math>10^n</math> (Power of 10 Notation)</li> </ul>		
Curriculum Supports:	<p>enVision 2011:</p> <p>The following topics cover all four parts of the standard.</p> <ul style="list-style-type: none"> <li>• Topic 12-6</li> <li>• CC-13-3a</li> </ul> <p>The following topics are divided by each part of the standard.</p> <ol style="list-style-type: none"> <li>a. Topic 12-2, Topic 13-1, CC-13-3b</li> <li>b. Topic 12-4, Topic 12-5, Topic 13-2, Topic 13-4</li> <li>c. Topic 14-1, Topic 14-2, Topic 14-3, Topic 14-5, Topic 14-5, Topic 14-6, Topic 14-7, CC-14-6a</li> <li>d. Topic 16-1, Topic 16-2</li> </ol>	<p>enVision 2012:</p> <p>The following topics cover all four parts of the standard.</p> <ul style="list-style-type: none"> <li>• Topic 12-2</li> <li>• Topic 13-3</li> <li>• Topic 13-4</li> </ul> <p>The following topics are divided by each part of the standard.</p> <ol style="list-style-type: none"> <li>a. Topic 13-1, Topic 13-5</li> <li>b. Topic 12-4, Topic 12-5, Topic 13-2, Topic 13-4</li> <li>c. Topic 14-1, Topic 14-2, Topic 14-3, Topic 14-5, Topic 14-6, Topic 14-7</li> <li>d. Topic 16-1, Topic 16-2</li> </ol>	<p>Big Ideas 2014:</p> <p>The following topics are divided by each part of the standard.</p> <ol style="list-style-type: none"> <li>a. Section 5.2, Section 5.3, Section 5.4</li> <li>b. Section 5.3, Section 5.4</li> <li>c. Section 5.5, Section 5.6</li> <li>d. Section 5.7</li> </ol>
Performance Task(s):	<ul style="list-style-type: none"> <li>• Big Ideas (2014): 6.RP.3 Windmills</li> <li>• Given a table, graph the information on a coordinate plane and explain the relationship.</li> <li>• Joe’s Gas and Go has drinks for the following prices: <ul style="list-style-type: none"> <li>*12 fl. oz. for \$0.89.</li> <li>*16 fl. oz. for \$0.99.</li> <li>*20 fl. oz. for \$1.09.</li> <li>*32 fl. oz. for \$1.19.</li> </ul> <p>Which drink costs the least per ounce? You may round to the nearest cent and use a calculator if you desire.</p> </li> <li>• Stop and Shop has pants for \$30 with a 10% discount, while Stay and Shop has pants for \$45 with a 20% discount. Which store has the pants for a better price? Use a table of equivalent values, number lines, or diagrams to solve and explain your reasoning.</li> <li>• In the store a package of candy that weighs 150 grams costs \$1.00. A package of 200 candies that</li> </ul>		

	each weigh 200 milligrams also costs \$1.00. Which package is the better deal? Explain why.															
Skill-Based Task	<ul style="list-style-type: none"> <li>Analyze the table below to determine the missing values. Fill in the missing values on the table below.</li> </ul> <table border="1" style="margin: 10px auto; border-collapse: collapse;"> <tr> <td style="padding: 5px;">Swimmers</td> <td style="padding: 5px;">20</td> <td style="padding: 5px;">30</td> <td style="padding: 5px;">40</td> <td style="padding: 5px;">60</td> <td style="padding: 5px;">90</td> <td style="padding: 5px;">100</td> </tr> <tr> <td style="padding: 5px;">Life Guards</td> <td style="padding: 5px;">2</td> <td style="padding: 5px;">3</td> <td style="padding: 5px;">4</td> <td style="padding: 5px;">6</td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> </tr> </table> <ul style="list-style-type: none"> <li>If 5 CDs cost \$60, what is the price of each CD?</li> <li>What is 25% of 60?</li> <li>72% of what number is 300?</li> <li>How many inches are in three feet?</li> <li>How many inches in two miles?</li> </ul>		Swimmers	20	30	40	60	90	100	Life Guards	2	3	4	6		
Swimmers	20	30	40	60	90	100										
Life Guards	2	3	4	6												
Additional Resources																
Science and Technical Subject Literacy Standards																
Reading	<p><b>6.RST.3</b> - Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.</p> <p><b>6.RST.4</b> - Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to 6<sup>th</sup> grades topics.</p> <p><b>6.RST.7</b> - Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).</p>	Literacy Implementation Ideas														
Writing	<p><b>6.WHST.2</b> - Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes.</p> <p><b>6.WHST.3</b> - Provide a concluding statement or section that follows from and supports the information or explanation presented.</p> <p><b>6.WHST.7</b> - Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.</p>															

6 <sup>th</sup> Grade Part 1: Algebraic Expressions & Properties (6.EE.2, 6.EE.3, 6.EE.4, 6.EE.6) & Part 2: Equations & Inequalities (6.EE.5, 6.EE.7, 6.EE.8, 6.EE.9) Unit 5 Theme: Characters		
Math Concepts	Prioritized Vocabulary	Cross Curricular Connections
Algebraic Expressions Properties of Addition & Subtraction Equations Inequalities Practice Standards	<ul style="list-style-type: none"> <li>• Claim</li> <li>• Source</li> <li>• Characteristics</li> </ul>	
Part 1: Algebraic Expressions & Properties		
<p><b>6.EE.2 Standard:</b> Write, read, and evaluate expressions in which letters stand for numbers.</p> <p>a. Write expressions that record operations with numbers and with letters standing for numbers. For example, express the calculation “Subtract <math>y</math> from 5” as <math>5 - y</math>.</p> <p>b. Identify parts of an expression using mathematical terms (sum, term, product, factor, quotient, coefficient); view one or more parts of an expression as a single entity. For example, describe the expression <math>2(8+7)</math> as a product of two factors; view <math>(8+7)</math> as both a single entity and a sum of two terms.</p> <p>c. Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including those involving whole-number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations).</p>		
Student Learning Targets:	<ul style="list-style-type: none"> <li>• I can write an expression with variables.</li> <li>• I can identify the parts of an expression (sum, term, product, factor, quotient, &amp; coefficient).</li> <li>• I can explain that a quantity in parenthesis is a both a number by itself and two numbers with an operation.</li> <li>• I can evaluate expressions using order of operations when given values of the variables.</li> </ul>	
Key Vocabulary:	<ul style="list-style-type: none"> <li>• Expression</li> <li>• Sum</li> <li>• Term</li> <li>• Product</li> <li>• Factor</li> <li>• Quotient</li> <li>• Coefficient</li> <li>• Evaluate</li> </ul>	

	<ul style="list-style-type: none"> <li>• Variable</li> <li>• Order of Operations</li> <li>• Formula</li> </ul>		
Curriculum Supports:	enVision 2011: <ul style="list-style-type: none"> <li>• Topic 2-1</li> <li>• Topic 2-6</li> <li>• Topic 2-7</li> <li>• Topic 2-8</li> <li>• Topic 3-8</li> </ul>	enVision 2012: <ul style="list-style-type: none"> <li>• Topic 2-1</li> <li>• Topic 2-6</li> <li>• Topic 2-7</li> <li>• Topic 2-8</li> <li>• Topic 3-8</li> </ul>	Big Ideas 2014: <ol style="list-style-type: none"> <li>a. Section 3.2</li> <li>b. Section 3.4</li> <li>c. Section 3.1</li> </ol>
Performance Task(s):	<ul style="list-style-type: none"> <li>• Big Ideas (2014): 6.EE.2 Geometry</li> <li>• Hannah is 3 years younger than Katie. Joey is twice as old as Hannah. Let <math>k</math> stand for Katie's age. Write an expression to represent Hannah's age. Using <math>k</math>, write an expression for Joey's age.</li> <li>• You know that you can find the area of a triangle using the formula <math>A = 1/2 bh</math>. If a triangle has an area of 48 cm<sup>2</sup>, what can its base and height be? Draw diagrams to justify your thinking.</li> </ul>		
Skill-Based Task:	<ul style="list-style-type: none"> <li>• Write word phrases as expressions</li> <li>• Provide an expression (e.g., <math>6x + 4</math>) for students to identify the parts.</li> <li>• Write an expression that has two terms and a product.</li> <li>• Write an expression that has a coefficient and a sum.</li> <li>• Complete a table for <math>5x+8</math> where <math>x = 0,3,7,12</math></li> </ul>		
<p><b>6.EE.3 Standard:</b> Apply the properties of operations to generate equivalent expressions. For example, apply the distributive property to the expression <math>3(2 + x)</math> to produce the equivalent expression <math>6 + 3x</math>; apply the distributive property to the expression <math>24x + 18y</math> to produce the equivalent expression <math>6(4x + 3y)</math>; apply properties of operations to <math>y + y + y</math> to produce the equivalent expression <math>3y</math>.</p>			
Student Learning Targets:	<ul style="list-style-type: none"> <li>• I can create an equivalent expression using the distributive property.</li> <li>• I can create an equivalent expression through the use of properties of operations such as the commutative, associative, and factoring</li> </ul>		
Key Vocabulary	<ul style="list-style-type: none"> <li>• Equivalent expression</li> <li>• Associative property</li> <li>• Commutative property</li> <li>• Distributive property</li> <li>• Identity property</li> <li>• Variable</li> </ul>		



Curriculum Supports:	enVision 2011: <ul style="list-style-type: none"> <li>• Topic 2-2</li> <li>• Topic 2-3</li> <li>• Topic 2-4</li> <li>• Topic 4-1</li> </ul>	enVision 2012: <ul style="list-style-type: none"> <li>• Topic 2-2</li> <li>• Topic 2-3</li> <li>• Topic 2-4</li> <li>• Topic 4-1</li> </ul>	Big Ideas 2014: <ul style="list-style-type: none"> <li>• Section 3.3</li> <li>• Section 3.4</li> </ul>
Performance Task(s):	<ul style="list-style-type: none"> <li>• Big Ideas (2014): 6.EE.3 Lacrosse</li> <li>• In one packet of nuts, there are two different types of nuts. There are 5 peanuts (p) and 7 cashews (c) in each container. I have 6 packets of nuts; write two expressions that show how many nuts I have all together. Possible answers: <math>6(5 + 7)</math> or <math>(6 \times 5) + (6 \times 7)</math></li> <li>• Sarah says that the two expressions <math>3(2 + x)</math> and <math>6 + x</math> are equivalent. Is she right? If not, explain.</li> </ul>		
Skill-Based Task:	<ul style="list-style-type: none"> <li>• Generate equivalent expressions for <math>4(x-2)</math>, <math>15x - 24y</math>, <math>x+x+y+y</math>, <math>5x + 2y</math>, <math>5r+(2s+2t)</math></li> </ul>		
<p><b>6.EE.4 Standard:</b> Identify when two expressions are equivalent (i.e., when the two expressions name the same number regardless of which value is substituted into them). For example, the expressions <math>y + y + y</math> and <math>3y</math> are equivalent because they name the same number regardless of which number <math>y</math> stands for.</p>			
Student Learning Targets:	<ul style="list-style-type: none"> <li>• I can identify when two expressions are equivalent.</li> </ul>		
Key Vocabulary	<ul style="list-style-type: none"> <li>• Equal</li> <li>• Equation</li> <li>• Equivalent</li> <li>• Expression</li> <li>• Variable</li> </ul>		
Curriculum Supports:	enVision 2011: <ul style="list-style-type: none"> <li>• Topic 4-1</li> </ul>	enVision 2012: <ul style="list-style-type: none"> <li>• Topic 4-1</li> </ul>	Big Ideas 2014: <ul style="list-style-type: none"> <li>• Section 3.3</li> <li>• Section 3.4</li> </ul>
Performance Task(s):	<ul style="list-style-type: none"> <li>• Big Ideas (2014): 6.EE.4 Perimeter of Geometric Figures</li> <li>• Have students generate equivalent expressions for the number 48, using at least two operations and verifying that their notation is correct.</li> </ul>		
Skill-Based Task	<ul style="list-style-type: none"> <li>• Are the following expressions equivalent <math>x+x+1+1=2x+2</math>, <math>5(x+3)=5x+5</math>?</li> </ul>		

<b>6.EE.6 Standard:</b> Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set.			
Student Learning Targets:	<ul style="list-style-type: none"> <li>I can write an expression or equation using a variable that helps me solve a real-world problem.</li> </ul>		
Key Vocabulary	<ul style="list-style-type: none"> <li>Coefficient</li> <li>Constant</li> <li>Equation</li> <li>Expression</li> <li>Solution</li> </ul>		
Curriculum Supports:	enVision 2011: <ul style="list-style-type: none"> <li>CC3-9a</li> </ul>	enVision 2012: <ul style="list-style-type: none"> <li>Topic 3-9</li> </ul>	Big Ideas 2014: <ul style="list-style-type: none"> <li>Section 3.2</li> <li>Section 3.4</li> </ul>
Performance Task(s):	<ul style="list-style-type: none"> <li>Big Ideas (2014): 6.EE.6 Earnings</li> <li>An appliance repairman charges \$50 for coming to a home for a service call and \$40 an hour for the service. Write an expression to represent her earnings for h hours.</li> <li>Sally delivered 7 newspapers and John delivered x number of newspapers. Write an expression showing how many total newspapers were delivered. Write an expression to represent how many John delivered if Sally delivered seven more newspapers than John.</li> </ul>		
Skill-Based Task	<ul style="list-style-type: none"> <li>N/A</li> </ul>		
Part 2: Equations & Inequalities			
<b>6.EE.5 Standard:</b> Understand solving an equation or inequality as a process of answering a question: which values from a specified set, if any, make the equation or inequality true? Use substitution to determine whether a given number in a specified set makes an equation or inequality true.			
Student Learning Targets:	<ul style="list-style-type: none"> <li>I can explain if a value from a set makes an inequality or equation true/false.</li> </ul>		
Key Vocabulary	<ul style="list-style-type: none"> <li>&gt;</li> <li>&lt;</li> <li>Equality</li> <li>Inequality</li> <li>Solution</li> <li>Substitution</li> </ul>		

Curriculum Supports:	enVision 2011: <ul style="list-style-type: none"> <li>• CC3-9a</li> <li>• CC15-6</li> </ul>	enVision 2012: <ul style="list-style-type: none"> <li>• Topic 3-9</li> <li>• Topic 15-6</li> </ul>	Big Ideas 2014: <ul style="list-style-type: none"> <li>• Section 7.2</li> <li>• Section 7.3</li> <li>• Section 7.5</li> <li>• Section 7.6</li> <li>• Section 7.7</li> </ul>
Performance Task(s):	<ul style="list-style-type: none"> <li>• Big Ideas (2014): 6.EE.5 Bees</li> <li>• Keith has \$500 in a savings account at the beginning of the summer. He wants to have at least \$200 in the account by the end of the summer. He withdraws \$25 each week for food and fun. Write an inequality that represents Keith’s situation. How many weeks can Keith withdraw money from his account?</li> </ul>		
Skill-Based Task	<ul style="list-style-type: none"> <li>• For the inequality <math>4x &gt; 16</math>, which of the following numbers 2,4,6,8 makes it true. Will the solution to <math>x - 5 = 34</math> be greater than or less than 34? Explain.</li> </ul>		
<p><b>6.EE.7 Standard:</b> Solve real-world and mathematical problems by writing and solving equations of the form <math>x + p = q</math> and <math>px = q</math> for cases in which <math>p, q</math> and <math>x</math> are all nonnegative rational numbers.</p>			
Student Learning Targets:	<ul style="list-style-type: none"> <li>• I can solve one-step equations with all four operations.</li> <li>• I can write and solve equations that represent real-world problems.</li> </ul>		
Key Vocabulary	<ul style="list-style-type: none"> <li>• Balance</li> <li>• Equations</li> </ul>		
Curriculum Supports:	enVision 2011: <ul style="list-style-type: none"> <li>• Topic 4-2</li> <li>• Topic 4-3</li> <li>• Topic 4-4</li> <li>• Topic 4-5</li> </ul>	enVision 2012: <ul style="list-style-type: none"> <li>• Topic 4-2</li> <li>• Topic 4-3</li> <li>• Topic 4-4</li> <li>• Topic 4-5</li> </ul>	Big Ideas 2014: <ul style="list-style-type: none"> <li>• Section 7.1</li> <li>• Section 7.2</li> <li>• Section 7.3</li> </ul>
Performance Task(s):	<ul style="list-style-type: none"> <li>• Big Ideas (2014): 6.EE.7 Dinosaurs</li> <li>• There were some grapes on the table. Logan ate <math>\frac{1}{6}</math> of them. He ate 5 grapes. Write an equation to represent the situation and solve.</li> <li>• Angela bought 5 shirts that each cost the same amount. She spent \$34.65. How much did she spend on each shirt? Write and solve an equation to solve the problem.</li> <li>• Ronnie earned \$.50, giving her a total of \$3.17. Write an equation that allows you to find her beginning amount.</li> </ul>		
Skill-Based Task	<ul style="list-style-type: none"> <li>• Solving addition and multiplication equations including fractions.</li> </ul>		

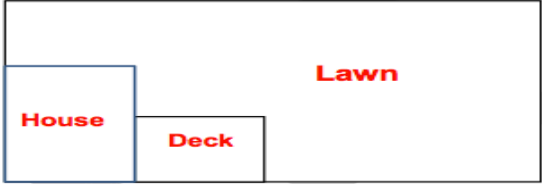
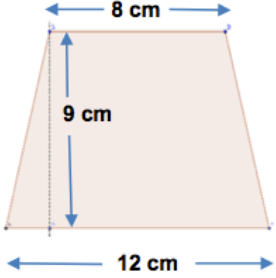
<b>6.EE.8 Standard:</b> Write an inequality of the form $x > c$ or $x < c$ to represent a constraint or condition in a real-world or mathematical problem. Recognize that inequalities of the form $x > c$ or $x < c$ have infinitely many solutions; represent solutions of such inequalities on number line diagrams.			
Student Learning Targets:	<ul style="list-style-type: none"> <li>I can write an inequality about a real-world situation and recognize that it has infinite solutions.</li> <li>I can graph an inequality on a number line.</li> </ul>		
Key Vocabulary	<ul style="list-style-type: none"> <li><math>&gt;</math></li> <li>Greater than</li> <li><math>&lt;</math></li> <li>Less than</li> <li>Inequality</li> </ul>		
Curriculum Supports:	enVision 2011: <ul style="list-style-type: none"> <li>CC15-6a</li> </ul>	enVision 2012: <ul style="list-style-type: none"> <li>Topic 15-6</li> </ul>	Big Ideas 2014: <ul style="list-style-type: none"> <li>Section 7.5</li> <li>Section 7.6</li> <li>Section 7.7</li> </ul>
Performance Task(s):	<ul style="list-style-type: none"> <li>Big Ideas (2014): 6.EE.8 Country Fair</li> <li>Water boils at 100°C. Write an inequality that represents all the temperatures at which water does not boil. Represent the solution on a number line.</li> </ul>		
Skill-Based Task	<ul style="list-style-type: none"> <li>Represent the solution to the following inequalities on a number line.: <math>n &gt; 0</math>, <math>n &lt; 5</math>, <math>n &gt; 3/4</math>, <math>n &lt; -1.5</math></li> </ul>		
<b>6.EE.9 Standard:</b> Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation. For example, in a problem involving motion at constant speed, list and graph ordered pairs of distances and times, and write the equation $d = 65t$ to represent the relationship between distance and time.			
Student Learning Targets:	<ul style="list-style-type: none"> <li>I can write an equation involving dependent and independent variables and evaluate that equation.</li> <li>I can make a table, graph or equation to represent a problem.</li> <li>I can organize and display data using tables and graphs.</li> </ul>		
Key Vocabulary	<ul style="list-style-type: none"> <li>Graph</li> <li>Table</li> <li>Equation</li> <li>Variable</li> </ul>		

	<ul style="list-style-type: none"> <li>• Independent variable</li> <li>• Dependent variable</li> <li>• Equivalent</li> </ul>		
Curriculum Supports:	enVision 2011: <ul style="list-style-type: none"> <li>• Topic 15-2</li> <li>• Topic 15-3</li> <li>• Topic 15-4 (Tables only)</li> </ul>	enVision 2012: <ul style="list-style-type: none"> <li>• Topic 15-2</li> <li>• Topic 15-3</li> <li>• Topic 15-4 (Tables only)</li> </ul>	Big Ideas 2014: <ul style="list-style-type: none"> <li>• Section 7.4</li> </ul>
Performance Task(s):	<ul style="list-style-type: none"> <li>• Big Ideas (2014): 6.EE.9 Hiking</li> <li>• You are training for a 13-mile race. On the first day you run 1.5 miles. Each day you run 0.5 mile longer than you ran on the previous day. How many days will it take you to work up to 13 miles? Create a table, graph, and equation and explain the relationship between the dependent and independent variables.</li> </ul>		
Skill-Based Task	<ul style="list-style-type: none"> <li>• Use the list of ordered pairs to create a table, graph, and an equation. (0,3), (1,5), (2,7), (3,9), (4,11).</li> </ul>		

<b>Additional Resources</b>
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Science and Technical Subject Literacy Standards		Literacy Implementation Ideas
Reading	<p><b>6.RST.3</b> - Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.</p> <p><b>6.RST.4</b> - Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to 6<sup>th</sup> grades topics.</p> <p><b>6.RST.7</b> - Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).</p>	
Writing	<p><b>6.WHST.2</b> - Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes.</p> <p><b>6.WHST.3</b> - Provide a concluding statement or section that follows from and supports the information or explanation presented.</p> <p><b>6.WHST.7</b> - Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.</p>	

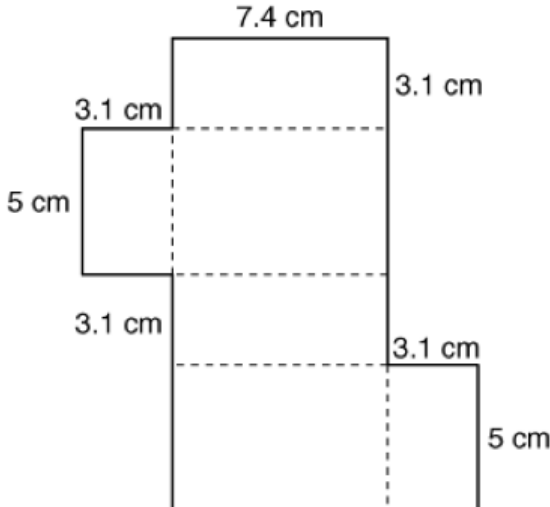
6 <sup>th</sup> Grade Area of Polygons (6.G.1, 6.G.3) & Surface Area and Volume (6.G.2, 6.G.4) Unit 6 Theme: Dreaming Big			
Math Concepts	Prioritized Vocabulary	Cross Curricular Connections	
Area of Polygons Surface Area and Volume Practice Standards	<ul style="list-style-type: none"> <li>• Bibliography</li> <li>• Credibility</li> <li>• Paraphrase</li> </ul>		
<b>6.G.1 Standard:</b> Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.			
Student Learning Targets:	<ul style="list-style-type: none"> <li>• I can put together and take apart shapes to help me find the area of right triangles, other triangles, special quadrilaterals and polygons.</li> <li>• I can make a line plot to display data sets of measurements in fractions.</li> <li>• I can apply what I know about taking apart and putting together shapes to find the area in real world situations.</li> </ul>		
Key Vocabulary:	<ul style="list-style-type: none"> <li>• Compose</li> <li>• Base</li> <li>• Height</li> <li>• Polygon</li> <li>• Decompose</li> <li>• Right Triangles</li> <li>• Special Quadrilaterals</li> <li>• Perpendicular</li> </ul>		
Curriculum Supports:	enVision 2011: <ul style="list-style-type: none"> <li>• Topic 17-2</li> <li>• Topic 17-3</li> </ul>	enVision 2012: <ul style="list-style-type: none"> <li>• Topic 17-2</li> <li>• Topic 17-3</li> </ul>	Big Ideas 2014: <ul style="list-style-type: none"> <li>• Section 4.1</li> <li>• Section 4.2</li> <li>• Section 4.3</li> <li>• Extension 4.3</li> </ul>

<p>Performance Task(s):</p>	<ul style="list-style-type: none"> <li>• Big Ideas (2014): 6.G.1 Concert Stages</li> </ul> <p>Mario needs to buy sod for his backyard. Here is a diagram of Mario's backyard. Determine how much sod he will need to purchase.</p>  <p><b>Teacher Note:</b> Students will have to identify appropriate measures for each component and then compose and decompose to come up with an answer. If they give answers in square centimeters or inches ask them to consider if a house and yard that small would be realistic.</p>
<p>Skill-Based Task:</p>	<p>Find the area of this trapezoid by composing and decomposing the shapes.</p> 
<p><b>6.G.3:</b> Draw polygons in the coordinate plane given coordinates for the vertices; use coordinates to find the length of a side joining points with the same first coordinate or the same second coordinate. Apply these techniques in the context of solving real-world and mathematical problems.</p>	
<p>Student Learning Targets:</p>	<ul style="list-style-type: none"> <li>• I can draw polygons in the coordinate plane when I am given the coordinates for the vertices.</li> <li>• I can use the coordinates of the vertices of a polygon on the coordinate plane to find the length of a side, joining points with the same first coordinate or the same second coordinate.</li> <li>• I can apply what I have learned about polygons on coordinate planes to real world and mathematical situations.</li> </ul>
<p>Key Vocabulary</p>	<ul style="list-style-type: none"> <li>• Coordinate Plane</li> <li>• Origin</li> <li>• x-axis</li> <li>• y-axis</li> </ul>

	<ul style="list-style-type: none"> <li>• Quadrant I</li> <li>• Quadrant II</li> <li>• Quadrant III</li> <li>• Quadrant IV</li> <li>• Vertex</li> <li>• Vertices</li> <li>• Coordinates</li> <li>• Polygons</li> <li>• x-coordinate</li> <li>• y-coordinate</li> <li>• Length</li> <li>• Cartesian coordinate plane</li> </ul>		
Curriculum Supports:	enVision 2011: <ul style="list-style-type: none"> <li>• CC-10-10a</li> </ul>	enVision 2012: <ul style="list-style-type: none"> <li>• Topic 10-10</li> </ul>	Big Ideas 2014: <ul style="list-style-type: none"> <li>• Section 4.4</li> </ul>
Performance Task(s):	<ul style="list-style-type: none"> <li>• Big Ideas (2014): 6.G.3 Facial Recognition</li> <li>• Given the coordinates A (2,5), B (-4,5), C (-4,1), and D (2,1) Jose says that the distance between A and D can be found by subtracting 2 from 5. Prove or disprove. Explain your answer with words, pictures, and equations.</li> </ul>		
Skill-Based Task:	<ul style="list-style-type: none"> <li>• Plot ordered pairs to form a polygon. Determine one of the side lengths.</li> <li>• Example: Plot the ordered pairs: A (2,6) B (2,2) C (-4,4). Find the side length AB.</li> </ul>		
<p><b>6.G.2 Standard:</b> Find the volume of a right rectangular prism with fractional edge lengths by packing it with unit cubes of the appropriate unit fraction edge lengths, and show that the volume is the same as would be found by multiplying the edge lengths of the prism. Apply the formulas <math>V = lwh</math> and <math>V = bh</math> to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real-world and mathematical problems.</p>			
Student Learning Targets:	<ul style="list-style-type: none"> <li>• I can use unit cubes to find the volume of a right rectangular prism and I understand that the mathematical formula (<math>V=lwh</math> or <math>V=bh</math>) will give me the same result.</li> <li>• I can use the mathematical formulas <math>V=lwh</math> or <math>V=bh</math> to determine the volume of real world objects.</li> </ul>		
Key Vocabulary	<ul style="list-style-type: none"> <li>• Volume</li> <li>• Rectangular Prism</li> <li>• Length</li> <li>• Width</li> <li>• Height</li> </ul>		



	<ul style="list-style-type: none"> <li>• Base</li> <li>• Cubic units</li> <li>• Fraction</li> <li>• Edge</li> <li>• Length</li> <li>• Unit fraction</li> </ul>		
Curriculum Supports:	enVision 2011: <ul style="list-style-type: none"> <li>• Topic 18-3</li> <li>• CC-18-4a</li> <li>• Topic 18-5</li> </ul>	enVision 2012: <ul style="list-style-type: none"> <li>• Topic 18-3</li> <li>• Topic 18-4</li> <li>• Topic 18-5</li> </ul>	Big Ideas 2014: <ul style="list-style-type: none"> <li>• Section 8.4</li> </ul>
Performance Task(s):	<ul style="list-style-type: none"> <li>• Big Ideas (2014): 6.G.2 Money</li> <li>• Build 3 rectangular prisms with the volume of 36 cubic units. At least one of the side lengths of each prism is a fractional unit. What are the dimensions of each of the rectangular prisms you built?</li> </ul>		
Skill-Based Task	<ul style="list-style-type: none"> <li>• A flower box is 3 ft. long <math>2\frac{3}{4}</math> ft. wide and <math>\frac{1}{2}</math> ft. deep. How many cubic feet of dirt can it hold?</li> <li>• A gallon of water uses 231 cubic in. of space. How many gallons of water are needed to fill this aquarium?</li> <li>• Draw a diagram to match: <math>l = 12\frac{1}{2}</math> in. <math>w = 8\frac{1}{4}</math> in. <math>h = 12\frac{1}{2}</math> in.</li> </ul>		
<p><b>6.G.4 Standard:</b> Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.</p>			
Student Learning Targets:	<ul style="list-style-type: none"> <li>• I can show how three-dimensional figures can be made using two -dimensional nets.</li> <li>• I can figure out the surface area of a three dimensional shape by using a net.</li> </ul>		
Key Vocabulary	<ul style="list-style-type: none"> <li>• Net</li> <li>• Three-Dimensional figures</li> <li>• Surface area</li> <li>• Vertices</li> <li>• Face</li> <li>• Edge</li> <li>• Length</li> <li>• Width</li> <li>• Base</li> <li>• Height</li> </ul>		

	<ul style="list-style-type: none"> <li>• Polyhedron</li> <li>• Prism</li> <li>• Pyramid</li> </ul>		
Curriculum Supports:	enVision 2011: <ul style="list-style-type: none"> <li>• Topic 17-6</li> <li>• Topic 18-1</li> <li>• Topic 18-2</li> </ul>	enVision 2012: <ul style="list-style-type: none"> <li>• Topic 17-6</li> <li>• Topic 18-1</li> <li>• Topic 18-2</li> <li>•</li> </ul>	Big Ideas 2014: <ul style="list-style-type: none"> <li>• Section 8.1</li> <li>• Section 8.2</li> <li>• Section 8.3</li> </ul>
Performance Task(s):	<ul style="list-style-type: none"> <li>• Big Ideas (2014): 6.G.4 Tents</li> <li>• Belinda had two boxes to wrap for a birthday party. Box A has a length of 12 in, width of 8 in, and height of 6 in. Box B has a length of 11 in, width of 9 in, and height of 7 in. Which box will require the least amount of wrapping paper?</li> </ul>		
Skill-Based Task	<ul style="list-style-type: none"> <li>• Find the surface are:</li> </ul> 		
Additional Resources			
Science and Technical Subject Literacy Standards		Literacy Implementation Ideas	
Reading	<b>6.RST.3</b> - Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.		

	<p><b>6.RST.4</b> - Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to 6<sup>th</sup> <i>grades topics</i>.</p> <p><b>6.RST.7</b> - Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).</p>	
Writing	<p><b>6.WHST.2</b> - Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes.</p> <p><b>6.WHST.3</b> - Provide a concluding statement or section that follows from and supports the information or explanation presented.</p> <p><b>6.WHST.7</b> - Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.</p>	