y	Numbers and Operations			
1. Analyze numbers using place value and prime factorization. Solve problems involving basic operations of rational numbers.		BASIC	PROFICIENT	ADVANCED
a. Compare and order rational numbers using symbols (<, >, and =) and a number line. **(DOK 1)**			**Compare and order** rational numbers.	
b. Use estimation strategies to determine the reasonableness of results in a variety of situations including rational number computations. **(DOK 2)**			**Use** estimation strategies to determine the reasonableness of results.	**Justify** estimation strategies to determine the reasonableness of results in a variety of situations including rational number computations.
c. Determine the Greatest Common Factor (GCF) and Least Common Multiple (LCM) of two numbers. **(DOK 2)**			**Determine** the Greatest Common Factor (GCF) and Least Common Multiple (LCM) of two numbers.	
d. Compute using basic operations with fractions and mixed numbers. Express answers in the simplest form. **(DOK 1)**		**Compute** using basic operations with fractions and mixed numbers.		
e. Solve problems by dividing whole and decimal numbers by decimals and interpret the quotient and remainder within the problem context. **(DOK 2)**			**Solve** problems by dividing whole and decimal numbers by decimals.	
f. Explain the relationship(s) among fractions, decimals, and percents and model and represent a specific quantity in multiple ways. **(DOK 2)**			**Explain** the relationship(s) among fractions, decimals, and percents.	
g. Model addition and subtraction of integers with physical materials and the number line. **(DOK 2)**			**Model** addition and subtraction of integers.	
h. Solve problems by finding the percentage of a number including percentages greater than 100 and less than 1. **(DOK 2)**			**Solve** problems by finding the percentage of a number.	

Numbers and Operations (cont'd)			
i. Multiply four-digit numbers by two-digit numbers (including whole numbers and decimals). **(DOK 1)**	**Multiply** four-digit numbers by two-digit numbers.		
j. Explain the meaning of multiplication and division of rational numbers. **(DOK 2)**		**Explain** the meaning of multiplication and division of rational numbers.	
k. Explain the meaning and relationship between absolute value and opposites. **(DOK 2)**		**Explain** the meaning and relationship between absolute value and opposites.	

Algebra			
2. **Use algebraic functions, patterns, and language across a variety of contexts.**	BASIC	PROFICIENT	ADVANCED
a. Solve simple equations using guess-and-check, diagrams, properties, or inspection, explaining the process used. **(DOK 2)**	**Solve** simple equations.	**Explain** the process used to solve simple equations.	
b. Complete a function table based on a given rule. **(DOK 2)**		**Complete** a function table based on a given rule.	
c. Formulate algebraic expressions, equations, and inequalities to reflect a given situation. **(DOK 2)**		**Formulate** algebraic expressions, equations, and inequalities to reflect a given situation.	**Justify** algebraic expressions, equations, and inequalities to reflect a given situation.
d. State the following properties using variables and apply them in solving problems: **(DOK 1)** • Zero property of multiplication • Inverse properties of addition/subtraction and multiplication/division • Commutative and associative properties of addition and multiplication • Identity properties of addition and multiplication • Distributive properties of multiplication over addition and subtraction		**State** the properties of basic operations using variables and apply them in solving problems.	

Algebra (cont'd)			
e. Describe a rule for a function table using words, symbols, and points on a graph and vice versa. **(DOK 2)**		**Describe** a rule for a function table.	**Justify** the description of a rule for a function table.
Geometry			
3. **Analyze geometric relationships of lines, angles, two- and three-dimensional shapes, and transformations.**	BASIC	PROFICIENT	ADVANCED
a. Compare, classify, and construct transformations (reflections, translations, and rotations). **(DOK 3)**	**Construct** transformations.	**Compare and classify** transformations.	**Explain** how to construct transformations.
b. Construct three-dimensional figures using manipulatives and generalize the relationships among vertices, faces, and edges (such as Euler's Formula). **(DOK 3)**	**Construct** three-dimensional figures.	**Compare and classify** three-dimensional figures.	
c. Draw, label, and classify polygons to include regular and irregular shapes. Identify congruent and symmetrical figures. **(DOK 1)**	**Label** polygons.	**Draw and classify** polygons. **Identify** congruent and symmetrical figures.	
d. Identify, estimate, and compare right, acute, and obtuse angles. **(DOK 1)**	**Identify** right, acute, and obtuse angles.	**Estimate and compare** right, acute, and obtuse angles.	
e. Explain the relationships between corresponding parts of the pre-image and image of a dilation. **(DOK 2)**		**Explain** the relationships between corresponding parts of the pre-image and image of a dilation.	
Measurement			
4. **Apply geometric formulas and standard (English and metric) units of measurement in mathematical and real-life situations.**	BASIC	PROFICIENT	ADVANCED
a. Convert units within a given measurement system to solve problems. **(DOK 1)**		**Convert** units within a given measurement system to solve problems.	

	Measurement (cont'd)			
b.	Calculate the perimeter and area of regular and irregular shapes using a variety of methods. **(DOK 2)**		**Calculate** the perimeter and area of regular and irregular shapes.	**Estimate** the area and perimeter of regular and irregular shapes.
c.	Determine the radius, diameter, and circumference of a circle. **(DOK 1)**		**Determine** the radius, diameter, and circumference of a circle.	
d.	Use scale factors to perform dilations and to solve ratio and proportion problems. **(DOK 2)**		**Use** scale factors to perform dilations and to solve ratio and proportion problems.	
e.	Predict and calculate the volume of prisms. **(DOK 2)**		**Predict and calculate** the volume of prisms.	**Justify** predictions involving the volume of prisms.
f.	Apply techniques and tools to accurately find length, area, and angle measures to appropriate levels of precision. **(DOK 1)**	**Apply** techniques and tools to accurately find length, area, and angle measures.		
g.	Explain the relationship of circumference of a circle to its diameter, linking to *pi*. **(DOK 1)**		**Explain** the relationship of circumference of a circle to its diameter, linking to *pi*.	
	Data Analysis and Probability			
5.	**Organize, interpret, analyze, and display data to predict trends.**	BASIC	PROFICIENT	ADVANCED
a.	Construct, interpret, and explain line graphs, double bar graphs, frequency plots, stem-and-leaf plots, histograms, and box-and-whisker plots. **(DOK 2)**	**Construct** line graphs, double bar graphs, frequency tables, stem-and-leaf plots, histograms, and box-and-whisker plots.	**Interpret and explain** line graphs, double bar graphs, frequency tables, stem-and-leaf plots, histograms, and box-and-whisker plots.	
b.	Determine how changes in data affect mean, median, mode, and range. **(DOK 2)**		**Determine** how changes in data affect mean, median, mode, and range.	
c.	Predict trends based on graphical representation. **(DOK 3)**		**Predict** trends based on graphical representation.	**Justify** prediction of trends based on graphical representation.