

Year at a Glance – 5th Grade

Math Curriculum								Extensions
6 weeks	Math Topics	TEK Objective		Concepts to Learn	Vocabulary			Projects
1 st	Place value	5.1A	5.15A	Read, write and compare whole numbers through the billions.	Period	Basic fact	Compatible numbers	Place value through the trillions
	Problem solving strategy	5.1B	5.15B	Compare and order whole numbers.	Million	Multiple pattern	underestimate	
	Problem solving with addition and Subtraction	5.3A	5.16B	Solve problems by using several problem solving strategies.	Billion	Product	overestimate	
	Rounding	5.3B		Read and write decimals to the thousandths place.	Tenths	Regroup	inverse operation	
	Estimating sums, differences, products, and quotients	5.3C		Identify equivalent decimals.	Hundredths	Partial product	Expression	
	Problem solving using multiplication	5.4A		Compare and order decimals on a number line and by using place value.	Thousandths	Distributive property		
	Problem solving with division	5.5A		Round whole numbers to a given place.	Numerical expression			
	Select appropriate diagram or equation.	5.6A		Estimate sums and differences.	Equivalent decimals			
		5.14A		Add and subtract whole numbers	Estimate			
		5.14C		Round decimals to a given place.	Variable			
		5.14D		Estimate sums and differences of decimals.	Algebraic expression			
				Find the sums and differences of decimals.	Equation			
				Use a fact or basic pattern to multiply mentally.	Evaluate			
				Estimate products by rounding.	Solution			
				Multiply by 1 or 2 digit numbers.				
				Write a number sentence to solve problems.				
				Estimate quotients by rounding or compatible numbers.				
				Divide 3- digit dividends by one digit divisors.				
				Use zeros in division.				
				Use patterns to divide.				
				Divide by a 2-digit divisor..				
				Divide money.				
				Write and evaluate numerical and algebraic expressions.				
				Write and solve equations for word problems.				

2 nd	<p>Factors and multiples Greatest common factors Prime and composite numbers Equivalent fractions Simplest form(reduced form) Fractions and mixed numbers Fractions and their decimals Addition and subtraction of fractions and mixed numbers Classify angles Line relationships Polygons and circles Classify triangles Classify quadrilaterals Symmetry Solid figures and attributes Transformations Ordered pairs and coordinate grid Number and geometric patterns Functions Relationships and graphs</p>	<p>5.2A 5.2B 5.2C 5.2D 5.3D 5.3E 5.5 5.5A 5.5B 5.7 5.8 5.8A 5.9 5.14A 5.14C 5.14D 5.15A 5.15B 5.16A</p>	<p>Find common factors and common multiples of sets of numbers. Identify the greatest common factor for a set of whole numbers. Identify factors as prime or composite and use them to find relationships. Identify and write equivalent fractions. Write fractions in simplest form. Model and write mixed numbers. Rename fractions greater than 1 as mixed numbers and mixed numbers as fractions greater than 1. Compare and order fractions and mixed numbers Relate fractions and decimals that name tenths, hundredths, and thousandths. Model addition and subtraction of fractions and mixed numbers. Add and subtract fractions and mixed numbers. Identify, draw, and classify angles, polygons and triangles. Identify parallel, perpendicular, and intersecting lines of two dimensional figures. Identify congruent parts of two –dimensional figures and congruent two-dimensional figures. Identify and describe line and rotational symmetry. Identify solid figures and their parts that are parallel, perpendicular, and congruent. Use a net to identify faces of a solid figure that are parallel, perpendicular, and congruent. Identify the faces of a solid figure that are parallel, perpendicular, and congruent. Use ordered pairs to graph and identify points on a coordinate grid. Identify, model, and sketch transformations on a coordinate grid. Identify, describe, predict, and extend geometric tessellations. Identify and describe number and geometric patterns. Use transformations to create and extend geometric patterns. Graph Graph relationships on a coordinate grid. Use function tables and graph functions on a coordinate grid(first quadrant). Use functions tables, graphing, and equations to show relationships.</p>	<p>Factor multiple common factor common multiple Greatest common factor composite number prime number equivalent fraction simplest form mixed number common multiple angle ray vertex right angle acute angle obtuse angle parallel lines intersecting lines perpendicular lines polygon regular polygon circle radius diameter chord congruent isosceles triangle scalene triangle equilateral triangle right triangle acute triangle obtuse triangle polyhedron base prism pyramid net coordinate grid ordered pair x-coordinate y-coordinate y-axis transformation translation reflection rotation tessellation function function table</p>	<p>Ordered pair pictures using all four quadrants. Create their own pictures and list the ordered pairs for the picture.</p>
3 rd	<p>Choose customary length Change customary linear units Customary capacity and weight Elapsed Time Metric length Change SI(metric) linear units Metric capacity and mass Fahrenheit and Celsius temperature</p>	<p>5.10 5.10A 510C 5.11A 5.11B 5.14A 5.14C 5.14D 5.15A 5.15B 5.15C 5.16A 5.16B</p>	<p>Estimate and measure using appropriate customary units and determine which measurement is more precise. Identify and choose customary units and tools. Identify and convert customary linear units of measurement. Convert customary capacity and weight units. Identify and convert measurements involving elapsed time. Identify and choose metric units and tools. Estimate and measure using appropriate metric units and determine which measurement is more precise. Identify and convert customary linear units of measurement. Convert metric capacity and mass units. Problem solve by using the skill estimate or actual measurement. Measure temperature and solve problems involving temperature.</p>	<p>Precision Millimeter Centimeter Meter Kilometer Fahrenheit Celcius</p>	<p>Outside measurement unit. Make a circuit board game for definitions of metric units.</p>

4 th	<p>Estimate and find perimeter Perimeter formulas Estimate and find areas of rectangles , triangles , and parallelograms Measure and find volume Relate perimeter, area and volume. Choose formulas and units</p>	<p>5.10 5.10B 5.10C 5.14A 5.14B 5.14C 5.14D 5.15A 5.15B 5.16A 5.16B</p>	<p>Estimate and find the perimeter of polygons. Use formulas to find the perimeter of polygons. Compare different strategies to solve problems. Estimate the area of regular and irregular figures. Count to find the area of square and rectangles. Find the area of squares and rectangles using formulas. Find the area of triangles. Find the area of parallelograms. Measure volume of rectangular prisms. Find the volume of a rectangular prism. Identify the appropriate units of measure for perimeter, area, and volume. Choose formulas to find perimeter, area, or volume and choose appropriate units. Solve problems by using the formulas.</p>	<p>Perimeter Area Square unit Height Base Volume Cubic units Volume</p>	<p>Play area, perimeter blackout. Build rectangular prisms and identify the perimeter, area, and volume. Measure real like objects with the appropriate tools.</p>
5 th	<p>Collect and organize data Mean, median, mode, and range Compare data Analyze Graphs Make pictographs and bar graphs Make Double bar graphs Make line graphs Choose the appropriate graph</p>	<p>5.5A 5.11A 5.13 5.13B 5.13C</p>	<p>Collect data using surveys and organize data in tables and line plots. Describe data in tables and graphs using the mean, median, mode, and range. Compare two or more sets of data. Compare different strategies to solve problems. Solve problems by using the strategy draw a diagram. Represent data by making a pictograph or a bar graph. Represent data by making a double bar graph Represent data by making a line graph. Select an appropriate graph. Make an appropriate graph to analyze a set of data.</p>	<p>Survey Sample Frequency table Population Random sample Range Outlier Mean Median Mode Range Pictograph Bar graph Circle graph Line graph Rend Double bar graph</p>	<p>Do a class survey. Make an appropriate graph to fit the data collected.</p>
6 th	<p>Probability and predictions Probability experiments Describe outcomes Predict outcomes of experiments Tree diagrams Combinations and Arrangements Probability expressed as a fraction Fairness</p>	<p>5.12A 5.12B 5.12C</p>	<p>Decide whether events have fair or unfair outcomes. Describe outcomes of probability experiments. Use experimental results to predict future events. Find all possible outcomes of an event. Find the number of possible combinations of sets of objects. Solve problems by comparing strategies. Express probabilities as fractions. Predict the results of probability experiments. Decide whether events have fair or unfair outcomes.</p>	<p>Event Equally likely Sample space Theoretical probability Trial Tree diagram Combination Arrangement</p>	<p>Play games with spinner and predict the probabilities of given events.</p>