

SUBJECT: Mathematics		GRADE: First Grade	
UNIT TITLE: Numbers and Operations			
UNIT OVERVIEW			
During this unit, students will: • Understand numbers, ways of representing numbers, relationships among numbers, and number systems • Understand meanings of operations and how they relate to one another • Compute fluently and make reasonable estimates			
LRG SKILLS AND DISPOSITIONS		PA STANDARDS	
		CC.2.1.1.B.1 Extend the counting sequence to read and write numerals to represent objects. CC.2.1.1.B.2 Use place-value concepts to represent amounts of tens and ones and to compare two digit numbers. CC.2.1.1.B.3 Use place-value concepts and properties of operations to add and subtract within 100. CC.2.2.1.A.1 Represent and solve problems involving addition and subtraction within 20. CC.2.2.1.A.2 Understand and apply properties of operations and the relationship between addition and subtraction.	
COMPETENCIES		LEARNING TARGETS	
<u>Competency:</u> I can understand, extend, analyze, and apply place value in a base ten system.		• I can use 1:1 correspondence. (K1MAA1B1) • I can count to 120, starting at any number less than 120. (K1MAA1B2) • I can read and write numerals up to 120 and represent a number of objects with a written numeral. (K1MAA1B3) • I can identify the missing number in any given sequence. (K1MAA1B4) • I can use patterns to skip count by 5’s and 10’s. (K1MAA1B5)	

	• I can use place value to order numbers from least to greatest and greatest to least. (K1MAA1B6) • I can identify numbers to 120 and represent the number using hundreds, tens, and ones. (K1MAA1B7) • I can compose and decompose numbers. (K1MAA1B8) • I can compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols $>$, $=$, $<$. (K1MAA1B9) • I can estimate quantities. (Ex: pile of counter = closer to 10 or 100) (K1MAA1B10)
<u>Competency:</u> I can understand and apply the properties of mathematical operations to solve problems.	• I can apply strategies to use an appropriate tool when solving addition/subtraction problems. (K1MAA2B1) • I can use manipulatives to understand addition/subtraction problems. (K1MAA2B2) • I can write addition and subtraction sentences within 20. (K1MAA2B3) • I can use fact families to understand the relationship between addition and subtraction. (K1MAA2B4) • I can complete missing addends using addition and subtraction. (K1MAA2B5) • I can extend mastery in addition/subtraction to 20 with fluency. (K1MAA2B6) • I can understand and apply associative and commutative property. (K1MAA2B7) • I can add 3 whole numbers whose sum is less than 20. (K1MAA2B8) • I can solve word problems using addition and subtraction. (K1MAA2B9) • I can use patterns to solve addition and subtraction problems. (K1MAA2B10) • I can subtract multiples of 10 from a two-digit number. (K1MAA2B11) • I can use regrouping to add two- digit numbers within 100. (K1MAA2B12)

SUBJECT: Mathematics

GRADE: First Grade

UNIT TITLE: Measurement, Data, and Probability	
UNIT OVERVIEW	
During this unit, students will: • Formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them • Select and use appropriate methods to analyze data • Develop and evaluate inferences and predictions that are based on data • Understand and apply basic concepts of probability	
LRG SKILLS AND DISPOSITIONS	PA STANDARDS
	CC.2.4.1.A.1 Order lengths and measure them both indirectly and by repeating length units. CC.2.4.1.A.2 Tell and write time to the nearest half hour using both analog and digital clocks. CC.2.4.1.A.4 Represent and interpret data using tables/charts.
COMPETENCIES	LEARNING TARGETS
<u>Competency</u> : I can understand and apply concepts of time.	• I can distinguish between the minute and hour hands. (K1MAA9B1) • I can tell and show time to the hour and half hour on an analog and digital clock. (K1MAA9B2)
<u>Competency</u> : I can understand and apply concepts of measurement.	• I can use standard (inch/foot) and non- standard units (unifix cubes, paper clips, etc.) of measurement to express the length of an object. (K1MAA10B1) • I can order and compare lengths of three objects. (K1MAA10B2)
<u>Competency</u> : I can represent and analyze data.	• I can make and read a pictograph, bar graph, and tally chart. (K1MAA13B1) (K1MAA13B3) (K1MAA13B4) • I can ask and answer questions about the data on a graph. (K1MAA13B2)

SUBJECT: Mathematics		GRADE: First Grade	
UNIT TITLE: Geometry			
UNIT OVERVIEW			
During this unit, students will: - Analyze characteristics and properties of two- and three-dimensional geometric shapes and develop mathematical arguments about geometric relationships - Use symmetry to analyze mathematical situations - Represent fractions by partitioning shapes - Use visualization, spatial reasoning, and geometric modeling to solve problems			
LRG SKILLS AND DISPOSITIONS		PA STANDARDS	
		CC.2.3.1.A.1 Compose and distinguish between two- and three-dimensional shapes based on their attributes CC.2.3.1.A.2 Use the understanding of fractions to partition shapes into halves and quarters.	
COMPETENCIES		LEARNING TARGETS	
<u>Competency:</u> I can investigate the properties of two- and three-dimensional geometric shapes.		- I can identify two-and three-dimensional shapes (circle, square, triangle, rectangle, hexagon, trapezoid, sphere, cone, rectangular prism). (K1MAA7B1) - I can compose two- and three- dimensional shapes and distinguish between attributes. (K1MAA7B2) - I can build and draw shapes to given attributes. (K1MAA7B3) - I can use pattern blocks to create new figures. (K1MAA7B4)	
<u>Competency:</u> I can identify decimals and fractions as they relate to the number system.		- I can divide shapes (circles and rectangles) into equal shares. (K1MAA3B1) - I can represent shapes and quantities in halves and fourths. (K1MAA3B)	