

SUBJECT: Mathematics		GRADE: Kindergarten	
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.K.A.1 Know number names and write and recite the count sequence. CC.2.1.K.A.2 Apply one-to-one correspondence to count the number of objects. CC.2.1.K.A.3 Apply the concept of magnitude to compare numbers and quantities. CC.2.1.K.B.1 Use place value to compose and decompose numbers within 19. CC.2.2.K.A.1 Extend the concepts of putting together and taking apart to add and subtract within 10.	
COMPETENCIES		LEARNING TARGETS	
<u>Competency:</u> I can understand, extend, analyze, and apply place value in a base ten system.		• I can demonstrate the relationship between numbers and quantity. (K1MAA1A1) • I can rote count to 100. (K1MAA1A2) • I can write numbers 0 to 5, 0 to 10, and 0 to 20. (K1MAA1A3) • I can apply the concept of more or less to compare objects and numerals 0 to 10 and 0 to 20. (K1MAA1A4) • I can identify and repeat number patterns (K1MAA1A5) • I can order numbers beginning at a given number. (0 to 5, 0 to 10, and 0 to 20) (K1MAA1A6)	

	• I know number names (0 to 5 , 0 to 10, and 0 to 20). (K1MAA1A7) • I can decompose numbers less than or equal to 10 in pairs in more than one way, by using objects or drawings and record decomposition by a drawing or equation. (K1MAA2A1) • I can apply ordinal numbers. (first-tenth) (K1MAA1A8)
<u>Competency:</u> I can understand and apply the properties of mathematical operations to solve problems.	• I can decompose numbers less than or equal to 10 in pairs in more than one way, by using objects or drawings and record decomposition by a drawing or equation. (K1MAA2A1) • I can show how to make 10 by using any number from 1-9 added to the given number, by using objects or drawings and recording the answer with a drawing or equation. (K1MAA2A2) • I can add and subtract fluently within 5. (K1MAA2A3) • I can solve word problems with 10. (Addition and Subtraction) (K1MAA2A4)

SUBJECT: Mathematics		GRADE: Kindergarten	
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			
LRG SKILLS AND DISPOSITIONS		PA STANDARDS	
		CC.2.4.K.A.1 Describe and compare attributes of length, area, weight, and capacity of everyday objects.	

	CC.2.4.K.A.4 Classify objects and count the number of objects in each category.
COMPETENCIES	LEARNING TARGETS
<u>Competency:</u> I can understand and apply concepts of measurement.	• I can describe measurable attributes of objects. (length, weight, area, capacity) (K1MAA10A1) • I can describe several measurable attributes of a single object. (K1MAA10A2) • I can compare two objects with an appropriate measurable attribute in common. (K1MAA10A3) • I can describe the differences and/or similarities between two objects. (K1MAA10A4) • I can order objects based on measurable attributes of objects. (K1MAA10A5) • I can estimate measurable attributes of objects numerically. (K1MAA10A6)
<u>Competency:</u> I can represent and analyze data.	• I can count and compare the quantities of each category and describe the difference. (K1MAA13A1) • I can classify up to 20 objects into categories using one attribute. (K1MAA13A2)

SUBJECT: Mathematics	GRADE: Kindergarten
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 • Use visualization, spatial reasoning, and geometric modeling to solve problems	

LRG SKILLS AND DISPOSITIONS	PA STANDARDS
	CC.2.3.K.A.1 Identify and describe two- and three-dimensional shapes. CC.2.3.K.A.2 Analyze, compare, create, and compose two- and three-dimensional shapes.
COMPETENCIES	LEARNING TARGETS
<u>Competency:</u> I can investigate the properties of two- and three-dimensional geometric shapes.	• I can describe the relative positions of objects using terms such as above, below, beside, in front, behind, and next to. (K1MAA7A1) • I can identify two-dimensional and three-dimensional shapes. (K1MAA7A2) • I can correctly name shapes regardless of their orientation or overall size: - o two-dimensional shapes (square, circle, triangle, rectangle, hexagon) - o three-dimensional shapes (cube, cone, cylinder, sphere) (K1MAA7A3) • I can use simple shapes to compose larger shapes. (K1MAA7A4) • I can analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts and other attributes. (K1MAA7A5)