

<b>Title</b>	<b>Mathematics Kindergarten (2012) - Hope</b>
Type	Individual
Document	Map
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Subject	Mathematics
Course	Math-Kindergarten
Grade(s)	KG
Location	Hope Township
Notes	
Attachments	



Duration: September/Week 1 - November/Week 10				
UNIT NAME: Counting and Cardinality				
Essential Question(s)	Content	Skills	Assessment(s)	Standards
How do we use numbers in our everyday lives?	Numbers 0 - 20 Successive Numbers Quantity	<ul style="list-style-type: none"> <li>Recognize numbers</li> <li>Know number names</li> <li>Count to 100 by ones and tens</li> <li>Count forward beginning with a given number</li> <li>Write numbers 0-20</li> <li>Represent a number with objects</li> <li>Understand relationship with numbers and quantities</li> <li>Connect counting to cardinality</li> <li>Say the number names in order</li> <li>Pair written word with the number of objects</li> <li>Understand successive numbers</li> <li>Count to answer "how many?" up to 20 when objects are in a line, rectangular array, or a circle, or as many as 10 things in a scattered configuration</li> <li>Identify greater than, less than, or equal to the number of objects in groups</li> <li>Compare two numbers between 1 and 10 presented as written numerals</li> </ul>	Graded Classwork Homework Observation Chapter Tests Drawings	K.CC-Counting and Cardinality (KG)[State:New Jersey CCSS] -Know number names and the count sequence. (KG) [State:New Jersey CCSS] K.CC.1-Count to 100 by ones and by tens. (KG)[State:New Jersey CCSS] K.CC.2-Count forward beginning from a given number within the known sequence (instead of having to begin at 1). (KG)[State:New Jersey CCSS] K.CC.3-Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects). (KG) [State:New Jersey CCSS] -Count to tell the number of objects. (KG)[State:New Jersey CCSS] K.CC.4-Understand the relationship between numbers and quantities; connect counting to cardinality. (KG)[State:New Jersey CCSS] K.CC.4.a-When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object. (KG)[State:New Jersey CCSS] K.CC.4.c-Understand that each successive number name refers to a quantity that is one larger.

				<p>(KG)[State:New Jersey CCSS] K.CC.5-Count to answer “how many?” questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects. (KG)[State:New Jersey CCSS] -Compare Numbers (KG) [State:New Jersey CCSS] K.CC.6-Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.* (KG)[State:New Jersey CCSS] K.CC.7-Compare two numbers between 1 and 10 presented as written numerals. (KG) [State:New Jersey CCSS]</p>
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Plans:

Duration: November/Week 11 - January/Week 18

UNIT NAME: Operations and Algebraic Thinking

Essential Question(s)	Content	Skills	Assessment(s)	Standards
How do we make more and less of something?	Objects Word Problem Number Sentence Numbers 1 - 10 Pairs	<ul style="list-style-type: none"> <li>• Understand addition as putting together and adding to</li> <li>• Understand subtraction as taking apart and taking from</li> <li>• Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (claps) acting out situations, verbal explanations, expressions, or equations</li> <li>• Solve addition and subtraction word problems</li> <li>• Add and subtract within 10</li> <li>• Decompose numbers less than or equal to 10 into pairs in more than one way (<math>4 + 1 = 5</math>, <math>3 + 2 = 5</math>)</li> <li>• Make groups of 10 when given a number</li> </ul>	Graded Classwork Homework Observation Chapter Tests Drawings	K.OA-Operations and Algebraic Thinking (KG)[State:New Jersey CCSS] -Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from. (KG)[State:New Jersey CCSS] K.OA.1-Represent addition and subtraction with objects, fingers, mental images, drawings*, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations. (KG) [State:New Jersey CCSS] K.OA.2-Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem. (KG) [State:New Jersey CCSS] K.OA.3-Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., $5 = 2 + 3$ and $5 = 4 + 1$ ). (KG)[State:New Jersey CCSS] K.OA.4-For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation. (KG)[State:New Jersey CCSS]

				K.OA.5-Fluently add and subtract within 5. (KG) [State:New Jersey CCSS]
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**Plans:**

Duration: January/Week 19 - March/Week 28				
UNIT NAME: Number and Operations in Base Ten				
Essential Question(s)	Content	Skills	Assessment(s)	Standards
How do make a group of ten?	Numbers 11 - 19 Base Ten Place Value Tens Ones	<ul style="list-style-type: none"> <li>• Work with numbers 11-19 to gain foundations for place value</li> <li>• Compose and decompose numbers 11 - 19 into ten ones and additional ones</li> <li>• Use objects or drawings to represent tens and ones</li> <li>• Record each composition or decomposition with a drawing or equation</li> </ul>	Graded Classwork Homework Observation Chapter Tests Drawings Performance example: Group together straws (or any objects) in tens or ones.	K.NBT-Number and Operations in Base Ten (KG)[State:New Jersey CCSS] -Work with numbers 11–19 to gain foundations for place value. (KG)[State:New Jersey CCSS] K.NBT.1-Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., $18 = 10 + 8$ ); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones. (KG) [State:New Jersey CCSS]
<b>Plans:</b>				

Duration: March/Week 29 - May/Week 38				
UNIT NAME: Measurement and Data				
Essential Question(s)	Content	Skills	Assessment(s)	Standards
How do we know how long or tall something is?	Measurable attribute Length Weight Height Category	<ul style="list-style-type: none"> <li>Describe measurable attributes of objects (such as length or weight)</li> <li>Directly compare two objects with a measurable attribute in common</li> <li>Identify which object has "more of" /"less of" the attribute</li> <li>Describe the difference in objects verbally or by drawing</li> <li>Sort objects into categories</li> <li>Classify objects into given categories</li> </ul>	Graded Classroom Homework Observation Chapter Tests Drawings Performance example: Use cubes (or any object) to determine the length of a classroom object, record in unit of measure.	K.MD-Measurement and Data (KG)[State:New Jersey CCSS] -Describe and compare measurable attributes. (KG) [State:New Jersey CCSS] K.MD.1-Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. (KG)[State:New Jersey CCSS] K.MD.2-Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference. For example, directly compare the heights of two children and describe one child as taller/shorter. (KG) [State:New Jersey CCSS] -Classify objects and count the number of objects in each category. (KG)[State:New Jersey CCSS] K.MD.3-Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. * (KG)[State:New Jersey CCSS]
<b>Plans:</b>				



Duration: May/Week 39 - June/Week 43

UNIT NAME: Geometry

Essential Question(s)	Content	Skills	Assessment(s)	Standards
Where do you see shapes in the world around us?	Squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, spheres Above Below Beside In front of Behind Next to Two-dimensional figures Three-dimensional figures Sides Vertices Corners	<ul style="list-style-type: none"> <li>• Identify and describe shapes</li> <li>• Use position words to describe the location of a shape or object</li> <li>• Distinguish between a shape's size and orientation</li> <li>• Identify two-dimensional and three-dimensional shapes</li> <li>• Analyze and compare two- and three-dimensional shapes according to size, orientation, differences, and similarities</li> <li>• Build models using shapes</li> <li>• Compose simple shapes to form larger shapes</li> </ul>	Graded Classwork Homework Observation Chapter Tests Drawings Performance example: Make a picture using different shapes.	K.G-Geometry (KG)[State:New Jersey CCSS] -Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres). (KG)[State:New Jersey CCSS] K.G.1-Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to. (KG) [State:New Jersey CCSS] K.G.2-Correctly name shapes regardless of their orientations or overall size. (KG)[State:New Jersey CCSS] K.G.3-Identify shapes as two-dimensional (lying in a plane, "flat") or three dimensional("solid"). (KG) [State:New Jersey CCSS] -Analyze, compare, create, and compose shapes. (KG) [State:New Jersey CCSS] K.G.4-Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length). (KG)[State:New Jersey CCSS]

				<p>K.G.5-Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes. (KG)[State:New Jersey CCSS] K.G.6-Compose simple shapes to form larger shapes. For example, “Can you join these two triangles with full sides touching to make a rectangle?” (KG)[State:New Jersey CCSS]</p>
<b>Plans:</b>				