

Shrewsbury Borough School Curriculum Guide

Kindergarten: Mathematics

First Marking Period Mathematics	Second Marking Period Mathematics	Third Marking Period Mathematics	Fourth Marking Period Mathematics
<p><u>Areas of Study:</u></p> <p><u>Identify and Describe Shapes (Squares, Circles, Triangles, Rectangles, Hexagons, Cubes, Cones, Cylinders and Spheres</u></p> <p>--Identify, describe, and name shapes (squares and rectangles, circles, triangles, hexagons) regardless of their orientation or size.</p> <p>---Identify, describe, and name shapes (cubes, cones, cylinders, and spheres) and relate them to real-life objects.</p> <p>--Describe objects in the environment using names of shapes.</p> <p>--Identify shapes as two-dimensional (flat), or three –</p>	<p><u>Areas of Study:</u></p> <p><u>Count to Tell Number of Objects</u></p> <p>--Use objects to represent and count the quantities 1, 2, 3, 4,5.</p> <p>--Recognize and write the numerals that describe the quantities 1,2,3,4,5.</p> <p>--Recognize and write the numeral that describes 0.</p> <p>--Recognize and identify a group of objects that has 1 more/fewer or 2 more/fewer than another group.</p> <p>--Use objects to represent and count the quantities of 6,7,8,9.</p>	<p><u>Areas of Study:</u></p> <p><u>Understanding Addition and Subtraction</u></p> <p>--Represent addition/subtraction with objects, drawings, mental images, sounds, acting out situations, verbal explanations, expressions, or equations.</p> <p>--Solve addition and subtraction word problems, add /subtract within 10 by using objects or drawings to represent the problem.</p> <p>--Decompose numbers less than or equal to 10 into pairs in more than one way by using objects or drawing and record each decomposition by a drawing or equation.</p>	<p><u>Areas of Study:</u></p> <p><u>Know Number Names and Count Sequence</u></p> <p>--Count to 100 by ones and by tens.</p> <p>--Count forward beginning from a given number within the known sequence.</p> <p>--Write numbers from 0-20.</p> <p>--Represent a number of objects with written numerals 0-20.</p> <p><u>Analyze, Compare, Create, and Compose Shapes</u></p> <p>--Analyze and compare two- and three- dimensional shapes (in different sizes and orientations), using informal</p>

<p>dimensional (solid).</p> <p><u>Sort and Classify objects and count the number of objects in each category</u></p> <p>--Identify objects that are the same or different by attributes of size, color, and shape.</p> <p>--Sort objects by one or more attributes.</p> <p>--Classify objects into given categories, count the numbers of objects in each category, and sort the categories by counting.</p> <p><u>Position and Location</u></p> <p>--Describe the relative position of said objects using terms such as “above, below, beside, in front of, behind, next to, over, under, on, left, right, inside or outside a given place.</p> <p><u>Patterns</u></p> <p>--Recognize and extend patterns (color, shape).</p>	<p>-- Recognize and write the numerals that describe the quantities 6,7,8,9.</p> <p>--Use objects to count the quantity 10.</p> <p>--Recognize and write the numeral that describes the quantity 10.</p> <p><u>Compare Numbers</u></p> <p>--Compare two numbers using sets of objects and one-to-one correspondence to determine which number is greater and which is less.</p> <p>--Given a number or set from 0-5, tell if the number is greater or less than 5.</p> <p>--Given a number or set from 0-12, tell if the number is greater or less than 10.</p> <p>--Count to identify a number that is 1 or 2 more/fewer than another number.</p>	<p>--For any 1-9, find the number that makes 10 when added to the given number by using objects or drawings, and record that answer with a drawing or equation.</p> <p><u>Count to Tell Number of Objects</u></p> <p>--Count to answer ‘how many?’ questions about as many as 20 things arranged in a line, 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.</p> <p><u>Work with Numbers 11-19 to Gain Foundations for Place Value</u></p> <p>--Compose and decompose numbers from 11 to 19 into ten ones and some further ones.</p> <p>--Record each composition or decomposition.</p>	<p>language to compose new shapes.</p> <p>--Describe their similarities, differences, parts, and other attributes.</p> <p>--Model shapes in the world by building shapes from components and drawing shapes.</p> <p>--Compose simple shapes for form larger shapes.</p> <p><u>Describe and Compare Measurable Attributes</u></p> <p>--Describe measurable attributes of objects (size, length, weight, capacity).</p> <p>--Describe several measurable attributes of a single object.</p> <p>--Directly compare two objects with a common measurable attribute to see which object has “more of” / ”less of” the attribute and describe the difference.</p>
---	---	---	--

--Create original patterns
(color, shape).

**Classify Objects and Count
the Number of Objects in
Each Category**

--Classify objects into given
categories, count the numbers
of objects in each category, and
sort the categories by counting.

<p>ESSENTIAL QUESTIONS:</p> <p>How can you tell if a shape is a square, circle, triangle, rectangle, or hexagon?</p> <p>What kind of figures roll, slide, stack?</p> <p>How can you describe the flat surfaces of solids?</p> <p>How can you use objects to solve a problem?</p> <p>What does looking at the size, color, or shape of objects help you know about them?</p> <p>How can you describe where something is using words such as above, below, beside, in front of, behind, next to, over, under, on, left, right, inside, outside?</p> <p>How does looking at the size, color, and/or shape of objects help you sort them?</p> <p>How can you tell what comes next in a (color or shape) pattern?</p>	<p>ESSENTIAL QUESTIONS:</p> <p>How does counting tell how many?</p> <p>Why is writing numbers (0-10) important?</p> <p>Why is the last number you say important when counting objects?</p> <p>What number would you use to show no objects?</p> <p>Why can you show the same number of objects in different ways?</p> <p>How does using one-to one correspondence help you compare two sets of objects?</p> <p>How can you tell whether a group has 1 or 2 more/fewer?</p> <p>How do you know you are counting correctly?</p> <p>How do you use counting to tell how many objects are in a set?</p> <p>How can you use a number line</p>	<p>ESSENTIAL QUESTIONS:</p> <p>How does moving two groups of objects together help you know how many objects there are in all?</p> <p>What do you find when you join two groups, or two parts of a whole?</p> <p>What symbol can you write to show joining two groups?</p> <p>What symbols can you write to show adding two groups and finding the sum?</p> <p>What information does an addition sentence tell you?</p> <p>How does moving an object(s) to the side of a group of objects help you know how many objects are left?</p> <p>How can you act out a number story about things taken away?</p> <p>What symbol can you write to show separating a part of a group from the whole group?</p>	<p>ESSENTIAL QUESTIONS:</p> <p>How can you tell if a number is odd or even?</p> <p>How can you count objects that are in groups of 15, 10?</p> <p>When you count by 5s,10s on a hundreds chart, what pattern do you see?</p> <p>Why is it easier to count objects that are arranged in groups of 5, 10?</p> <p>How can you use smaller shapes to make larger shapes?</p> <p>How can you create different shapes from other shapes?</p> <p>How do you know when shapes are exactly the same?</p> <p>What kinds of figures roll?</p> <p>What kinds of figures slide?</p> <p>What kinds of figures stack?</p> <p>How can you describe the flat surfaces of solids?</p> <p>How can you decide which</p>

<p>How can you create your own pattern?</p>	<p>to help count from 0-10?</p> <p>How do you know which number is greater than another?</p> <p>How can you use 5 as a benchmark to compare numbers?</p> <p>How can you tell if a number is less than 10?</p> <p>How can you find the number that is 1 or 2 more/fewer than another number?</p> <p>How do you use counters to help you?</p>	<p>What symbol can you write in a number sentence between the number being subtracted and the number that tells how many objects are left?</p> <p>What information does a subtraction sentence tell you?</p> <p>How does using a ten frame help?</p> <p>When should you write the number 11, 12 13, etc., to tell about a set of objects?</p>	<p>object is larger/smaller?</p> <p>What words tell how long objects are?</p> <p>How can you compare and order the length of three objects?</p> <p>How can you measure length with cubes?</p> <p>How can you tell if a container holds the same or more or less than another?</p> <p>How can you compare the weights of two objects?</p> <p>How can you use connecting cubes and a balance to find out how much something weighs?</p>
---	---	---	---

<p>CCSS:</p> <p>K.G.1. Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as <i>above</i>, <i>below</i>, <i>beside</i>, <i>in front of</i>, <i>behind</i>, and <i>next to</i>.</p> <p>K.G.2. Correctly name shapes regardless of their orientations or overall size.</p> <p>K.G.3. Identify shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (“solid”).</p>	<p>CCSS:</p> <p>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).</p> <p>K.CC.4. Understand the relationship between numbers and quantities; connect counting to cardinality.</p> <p style="padding-left: 40px;">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.</p> <p style="padding-left: 40px;">Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.</p> <p style="padding-left: 40px;">Understand that each successive number name refers to a quantity that is one larger.</p> <p>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.</p>	<p>CCSS:</p> <p>K.OA.1. Represent addition and subtraction with objects, fingers, mental images, drawings¹, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.</p> <p>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.</p> <p>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 $5 = 4 + 1$).</p> <p>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.</p> <p>K.OA.5. Fluently add and subtract within 5.</p> <p>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 (such as $18 =$</p>	<p>CCSS:</p> <p>K.CC.1. Count to 100 by ones and by tens.</p> <p>K.CC.2. Count forward beginning from a given number within the known sequence (instead of having to begin at 1).</p> <p>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).</p> <p>K.G.5. Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.</p> <p>K.G.6. Compose simple shapes to form larger shapes. <i>For example, “Can you join these two triangles with full sides touching to make a rectangle?”</i></p> <p>K.MD.1. Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.</p> <p>K.MD.2. Directly compare two objects with a measurable attribute in common, to see which object has “more of”/“less of” the</p>
--	---	---	---

	<p>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.¹</p> <p>K.CC.7. Compare two numbers between 1 and 10 presented as written numerals</p>	<p>10 + 8); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.</p>	<p>attribute, and describe the difference. <i>For example, directly compare the heights of two children and describe one child as taller/shorter.</i></p> <p>K.MD.3. Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.¹</p>
<p>ASSESSMENT:</p> <p>Formative Assessment: Teacher Observation Student Sheets Response Sheets Performance Based Assessment</p> <p>Summative Assessment: Benchmark Assessments End of Module Assessment Portfolio Assessment MAP Testing</p>	<p>ASSESSMENT:</p> <p>Formative Assessment: Teacher Observation Student Sheets Response Sheets Performance Based Assessment</p> <p>Summative Assessment: Benchmark Assessments End of Module Assessment Portfolio Assessment MAP Testing</p>	<p>ASSESSMENT:</p> <p>Formative Assessment: Teacher Observation Student Sheets Response Sheets Performance Based Assessment</p> <p>Summative Assessment: Benchmark Assessments End of Module Assessment Portfolio Assessment MAP Testing</p>	<p>ASSESSMENT:</p> <p>Formative Assessment: Teacher Observation Student Sheets Response Sheets Performance Based Assessment</p> <p>Summative Assessment: Benchmark Assessments End of Module Assessment Portfolio Assessment MAP Testing</p>