## HARFORD COUNTY PUBLIC SCHOOLS KINDERGARTEN MATHEMATICS CURRICULUM

CLICK HERE for the Maryland College and Career Ready Standards for Kindergarten Mathematics.

## Topic 1: Numbers 0 to 5

Primary Resource: enVisionmath2.0 Kindergarten, Savvas Learning Company, 2016.

## Enduring Understandings

- Number Uses, Classification, and Representation - Numbers can be used for different purposes, and numbers can be classified and represented in different ways.
- Numbers - The set of real numbers is infinite and ordered. Whole numbers, integers, and fractions are real numbers. Each real number can be associated with a unique point on the number line.
- Equivalence - Any number, measure, numerical expression, algebraic expression, or equation can be represented in an infinite number of ways that have the same value.


## Essential Question

- How can numbers 0 through 5 be counted, read, and written?

| Lesson Title | Lesson Overview | Standards |
| :--- | :--- | :--- | :--- |
| Count 1, 2, and 3 | Counting tells how many are in a group, regardless of their arrangement or the order in which they <br> were counted. The last number said when counting a group is the total. Counting is cumulative. | K.CC.B.4a <br> K.CC.B.5 |
| Recognize 1, 2, and 3 in <br> Different Arrangements | Counting tells how many are in a group, regardless of their arrangement or the order in which they <br> were counted. The last number said when counting a group is the total. Counting is cumulative. | K.CC.B. 4 b <br> K.CC.B.5 |
| Read and Write 1, 2, and 3 | There is a unique symbol that goes with each number word. | K.CC.A.3 |
| Count 4 and 5 | Counting tells how many are in a group, regardless of their arrangement or the order in which they <br> were counted. The last number said when counting a group is the total. Counting is cumulative. | K.CC.B. 4 a <br> K.CC.B.5 |

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| Recognize 4 and 5 in <br> Different Arrangements | Counting tells how many are in a group, regardless of their arrangement or the order in which they <br> were counted. The last number said when counting a group is the total. Counting is cumulative. | K.CC.B.4b <br> K.CC.B.5 |
| :--- | :--- | :--- |
| Read and Write 5 and 5 | There is a unique symbol that goes with each number word. | K.CC.A.3 |
| Identify the Number | Zero is a number that tells how many objects there are when there are none. | K.CC.B.4a <br> K.CC.B.5 |
| Read and Write 0 | Zero is a number that tells how many objects there are when there are none. | K.CC.A.3 |
| Ways to Make 5 | There is more than one way to show a number | K.OA.A.3 <br> K.CC.B.4 |
| Count Numbers to 5 | There is a specific order to the set of whole numbers | K.CC.B.4c <br> K.CC.B.4a |
| Math Practices and Problem <br> Solving: Construct <br> Arguments | Good math thinkers use math to explain why they are right. They can talk about the math that others <br> do, too. | MP.3 |

## HARFORD COUNTY PUBLIC SCHOOLS KINDERGARTEN MATHEMATICS CURRICULUM

## Topic 2: Compare Numbers 0 to 5

## Primary Resource: enVisionmath2.0 Kindergarten, Savvas Learning Company, 2016.

## Enduring Understandings

- Number Uses, Classification, And Representation - Numbers can be used for different purposes, and numbers can be classified and represented in different ways.
- Numbers - The set of real numbers is infinite and ordered. Whole numbers, integers, and fractions are real numbers. Each real number can be associated with a unique point on the number line.
- Comparison - Numbers, expressions, measures, and objects can be compared and related to other numbers, expressions, measures, and objects in different ways.


## Essential Question

- How can numbers 0 to 5 be compared and ordered?

| Lesson Title | Lesson Overview | Standards |
| :--- | :--- | :--- | :--- |
| Equal Groups | Two groups of objects are equal in number if they can be directly matched, one-to-one, with no <br> extras in either group. | K.CC.C. 6 |
| Great Than | Two groups of objects can be directly compared using a matching process. | K.CC.C.6 |
| Less Than | Two groups of objects can be directly compared using a matching process. | K.CC.C.6 |
| Compare Groups to 5 by <br> Counting | Two sets of objects can be compared by number using counting strategies, which is a more efficient <br> method than matching. | K.CC.C. 6 <br> K.CC.C. 7 |
| Compare Numbers to 5 | Two numbers can be compared by using the counting number sequence. A number represents a <br> quantity greater than another quantity if it is later in the sequence. | K.CC.C.7 |
| Math Practices and <br> Problem Solving: Model <br> with Math | Good math thinkers use math they know to show and solve problems. | MP.4 |

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## KINDERGARTEN MATHEMATICS CURRICULUM

## Topic 3: Numbers 6 to 10

## Primary Resource: enVisionmath2.0 Kindergarten, Savvas Learning Company, 2016.

## Enduring Understandings

- Number Uses, Classification, And Representation - Numbers can be used for different purposes, and numbers can be classified and represented in different ways.
- Equivalence - Any number, measure, numerical expression, algebraic expression, or equation can be represented in an infinite number of ways that have the same value.


## Essential Question

- How can numbers 6 to 10 be counted, read, and written?

| Lesson Title | Lesson Overview | Standards |
| :--- | :--- | :--- | :--- |
| Count 6 and 7 | Counting tells how many are in a set, or group, no matter which order the objects are counted. The <br> last number said when counting a group is the total. Counting is cumulative. | K.CC.B.4a |
| Read and Write 6 and 7 | There is a unique symbol that goes with each number word. | K.CC.A.3 <br> K.CC.B.5 |
| Count 8 and 9 | Counting tells how many are in a set, or group, no matter which order the objects are counted. The <br> last number said when counting a group is the total. Counting is cumulative. | K.CC.B.4a |
| Read and Write 8 and 9 | There is a unique symbol that goes with each number word. | K.CC.A.3 <br> K.CC.B.5 |
| Count 10 | Counting tells how many are in a set, or group, no matter which order the objects are counted. The <br> last number said when counting a group is the total. Counting is cumulative. | K.CC.B.4a <br> K.CC.B.4b |
| Read and Write 10 | There is a unique symbol that goes with each number word. | K.CC.A.3 <br> K.CC.B.5 |

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 KINDERGARTEN MATHEMATICS CURRICULUM| Ways to Make 10 | There is more than one way to show a number. | K.OA.A.3 <br> K.CC.B.4 |
| :--- | :--- | :--- |
| Math Practices and Problem <br> Solving: Look For and Use <br> Structure | Good math thinkers look for patterns in math to help solve problems. | MP. 7 |

## HARFORD COUNTY PUBLIC SCHOOLS KINDERGARTEN MATHEMATICS CURRICULUM

## Topic 4: Compare Numbers 0 to 10

## Primary Resource: enVisionmath2.0 Kindergarten, Savvas Learning Company, 2016.

## Enduring Understandings

- Comparison - Numbers, expressions, measures, and objects can be compared and related to other numbers, expressions, measures, and objects in different ways.


## Essential Question

- How can numbers 0 to 10 be compared and ordered?

| Lesson Title | Lesson Overview | Standards |
| :--- | :--- | :--- | :--- |
| Compare Groups to 10 | In comparing two groups, the group with more objects is greater in number than the other. <br> The group with fewer objects is less in number than the other. | K.CC.C. 6 |
| Compare Numbers Using <br> Numerals to 10 | In a pair of numbers, the number that tells more is greater. The number that tells fewer is <br> less. | K.CC.C. 6 <br> K.CC.C. 7 |
| Compare Groups to 10 by <br> Counting | Two groups can be compared by counting the number of objects in each group and finding <br> the position of each number within the counting sequence. | K.CC.C. 6 <br> K.CC.C. 7 |
| Compare Numbers to 10 | Two numbers can be compared by finding the position of each number within the counting <br> sequence. | K.CC.C. 7 |
| Count Numbers to 10 | There is a specific order to the set of whole numbers. | K.CC.A. 2 <br> K.CC.B.4C <br> K.CC.C. 7 |
| Math Practices and Problem <br> Solving: Repeated Reasoning | Good math thinkers look for things that repeat in a problem. They use what they learn from <br> one problem to help them solve other problems. | MP.8 |

## HARFORD COUNTY PUBLIC SCHOOLS KINDERGARTEN MATHEMATICS CURRICULUM

## Topic 5: Classify and Count Data

## Primary Resource: enVisionmath2.0 Kindergarten, Savvas Learning Company, 2016.

## Enduring Understandings

- Comparison - Numbers, expressions, measures, and objects can be compared and related to other numbers, expressions, measures, and objects in different ways.
- Data Collection and Representation - Some questions can be answered by collecting and analyzing data, and the question to be answered determines the data that need to be collected and how best to collect the data. Data can be represented visually using tables, charts, and graphs. The type of data determines the best choice of visual representation.


## Essential Question

- How can classifying data help answer questions?

| Lesson Title | Lesson Overview | Standards |
| :--- | :--- | :--- | :--- |
| Classify Objects into Categories | Objects can be classified into two categories, based on whether they have or do not have <br> a particular attribute. | K.MD.B.3 |
| Count the Number of Objects in Each <br> Category | Objects can be classified into two categories, based on whether they have or do not have <br> a particular attribute. Each group can then be counted. | K.MD.B.3 <br> K.CC.B.5 |
| Sort the Categories by Counting | Data can be sorted and compared in a variety of ways. Objects can be sorted by putting <br> those with a particular attribute in one group and those without the attribute in another <br> group. Then, the groups can be counted and the categories can be compared by count. | K.MD.B.3 <br> K.CC.C. 6 <br> K.CC.C. 7 |
| Math Practices \& Problem-Solving: <br> Critique Reasoning | Good math thinkers use math to explain why they are right. They can talk about the math <br> that others do too. | MP.3 |

## HARFORD COUNTY PUBLIC SCHOOLS KINDERGARTEN MATHEMATICS CURRICULUM

## Topic 6: Understand Addition

## Primary Resource: enVisionmath2.0 Kindergarten, Savvas Learning Company, 2016.

## Enduring Understandings

- Operations Meanings and Relationships - There are multiple interpretations of addition, subtraction, multiplication, and division of rational numbers, and each operation is related to other operations.
- Variables, Expressions, and Equations - Letters and symbols, called variables, can be used to stand for a number or any number from a particular set of numbers. Some mathematical and real-world situations can be represented using variables, expressions, and equations.
- Patterns, Relations, and Functions - Relationships can be described and generalizations made for mathematical situations that have numbers or objects that repeat in predictable ways. For some relationships, mathematical expressions and equations can be used to describe how members of one set are related to members of a second set.


## Essential Question

- What types of situations involve addition?

| Lesson Title | Lesson Overview | Standards |
| :--- | :--- | :--- | :--- |
| Explore Addition | Addition can be shown in different ways, such as with objects, fingers, mental <br> images, drawings, sounds, acting out situations, verbal explanations, expressions, or <br> equations. | K.OA.A. 1 |
| Represent Addition as Adding To | Adding one or more objects to an existing group is one interpretation of addition. | K.OA.A.1 <br> K.CC.A. 2 |
| Represent Addition as Putting Together | Putting together parts to make a whole is one interpretation of addition. | K.OA.A. 1 |
| Use the Plus Sign | Adding groups can be shown in an addition expression that uses the plus sign (+). | K.OA.A.1 |
| Represent and Explain Addition with <br> Equations | Adding parts together to make a whole is one interpretation of addition. Equations <br> using the + and $=$ can be used to show parts of a whole. | K.OA.A. 1 |
| Continue to Represent and Explain <br> Addition with Equations | Adding parts together to make a whole is one interpretation of addition. Equations <br> using the + and $=$ can be used to show parts of a whole. | K.OA.A.1 |

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| Solve Addition Word Problems: Add To | Objects, drawings, counting, and equations, can be used to help solve addition <br> problems involving adding to. | K.OA.A. 2 <br> K.OA.A.1 |
| :--- | :--- | :--- |
| Solve Addition Word Problems: Put <br> Together | Objects, drawings, counting, and equations, can be used to help solve addition <br> problems involving putting together. | K.OA.A.2 <br> K.OA.A. 1 |
| Use Patterns to Develop Fluency in <br> Addition | Patterns can be used to help solve addition problems. | K.OA.A.5 |
| Math Practices \& Problem-Solving: <br> Model with Math | Good math thinkers use math they know to show and solve problems. | MP. 4 |

## HARFORD COUNTY PUBLIC SCHOOLS KINDERGARTEN MATHEMATICS CURRICULUM

## Topic 7: Understand Subtraction

## Primary Resource: enVisionmath2.0 Kindergarten, Savvas Learning Company, 2016.

## Enduring Understandings

- Operations Meanings and Relationships - There are multiple interpretations of addition, subtraction, multiplication, and division of rational numbers, and each operation is related to other operations.
- Variables, Expressions, and Equations - Letters and symbols, called variables, can be used to stand for a number or any number from a particular set of numbers. Some mathematical and real-world situations can be represented using variables, expressions, and equations.
- Patterns, Relations, and Functions - Relationships can be described and generalizations made for mathematical situations that have numbers or objects that repeat in predictable ways. For some relationships, mathematical expressions and equations can be used to describe how members of one set are related to members of a second set.


## Essential Question

- How can taking apart and taking from in different ways help you learn about subtraction?

| Lesson Title | Lesson Overview | Standards |
| :--- | :--- | :--- |
| Explore Subtraction | Subtraction can be shown in different ways, such as with objects, fingers, mental <br> images, drawings, sounds, acting out situations, verbal explanations, expressions, <br> or equations. | K.OA.A.1 |
| Represent Subtraction as Taking Apart | Separating parts from a whole is one interpretation of subtraction. | K.OA.A.1 |
| Represent Subtraction as Taking From | Taking parts from a whole is one interpretation of subtraction. | K.OA.A.1 <br> K.OA.A. 2 |
| Use the Minus Sign | Take apart and take from subtraction situations can be shown in a subtraction <br> expression that uses the minus sign ( - ). | K.OA.A.1 |
| Represent and Explain Subtraction with <br> Equations | Subtraction equations with - and $=$ can be used to show subtraction situations. | K.OA.A.1 |

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| Continue to Represent and Explain <br> Subtraction with Equations | Subtraction equations with - and = can be used to show subtraction situations. | K.OA.A.1 |
| :--- | :--- | :--- |
| Solve Subtraction Word Problems: Take <br> From | Objects, words, drawings, counting, and equations can be used to help solve <br> subtraction problems involving taking from. | K.OA.A.2 <br> K.OA.A. 1 |
| Use Patterns to Develop Fluency in <br> Subtraction | Patterns can be used to help solve subtraction problems. | K.OA.A.5 |
| Math Practices \& Problem-Solving: Use <br> Appropriate Tools | Good math thinkers know how to pick the right tools to solve math problems. | MP.5 |

## HARFORD COUNTY PUBLIC SCHOOLS KINDERGARTEN MATHEMATICS CURRICULUM

## Topic 8: More Addition and Subtraction

## Primary Resource: enVisionmath2.0 Kindergarten, Savvas Learning Company, 2016.

## Enduring Understandings

- Equivalence - Any number, measure, numerical expression, algebraic expression, or equation can be represented in an infinite number of ways that have the same value.
- Operations Meanings and Relationships - There are multiple interpretations of addition, subtraction, multiplication, and division of rational numbers, and each operation is related to other operations.
- Basic Facts and Algorithms - There is more than one algorithm for each of the operations with rational numbers. Some strategies for basic facts and most algorithms for operations with rational numbers, both mental math and paper and pencil, use equivalence to transform calculations into simpler ones.


## Essential Questions

- How can decomposing numbers in more than one way help you learn about addition and subtraction?

| Lesson Title | Lesson Overview | Standards |
| :--- | :--- | :--- |
| Decompose and Represent Numbers to 5 | Numbers can be broken apart in many ways. An addition equation can show how a <br> number is broken into two parts. | K.OA.A. 3 |
| Related Facts | Addition and subtraction facts have an inverse relationship. Equations using +, -, and <br> = can be used to show parts of a whole. | K.OA.A. 5 |
| Math Practices \& Problem-Solving: <br> Reasoning | Good math thinkers know how to think about words and numbers to solve problems. | MP. 2 |
| Fluently Add and Subtract to 5 | Addition and subtraction facts can be solved using different strategies. | K.OA.A.5 |
| Decompose and Represent 6 and | Numbers can be broken apart in many ways. An addition equation can show how a <br> number is broken into two parts. | K.OA.A.3 |
| Decompose and Represent 8 and 9 | Numbers can be broken apart in many ways. An addition equation can show how a <br> number is broken into two parts. | K.OA.A.3 |

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| Decompose and Represent 10 | Numbers can be broken apart in many ways. An addition equation can show how a <br> number is broken into two parts. | K.OA.A. 3 |
| :--- | :--- | :--- |
| Solve Word Problems: Both Addends <br> and Unknown | Objects, drawings, counting, and equations can be used to help solve addition <br> problems involving unknown addends. | K.OA.A. 2 |
| Find the Missing Part of 10 | For any number 1-9, there is another number to make 10. | K.OA.A.4 |
| Continue to Find the Missing Part of 10 | For any number 1-9, there is another number to make 10. | K.OA.A.4 |

## HARFORD COUNTY PUBLIC SCHOOLS KINDERGARTEN MATHEMATICS CURRICULUM

## Topic 9: Count Numbers to 20

Primary Resource: enVisionmath2.0 Kindergarten, Savvas Learning Company, 2016.

## Enduring Understandings

- The Base Ten Numeration System - The base ten numeration system is a scheme for recording numbers using digits 0-9, groups of ten, and place value.
- Equivalence - Any number, measure, numerical expression, algebraic expression, or equation can be represented in an infinite number of ways that have the same value.
- Comparison - Numbers, expressions, measures, and objects can be compared and related to other numbers, expressions, measures, and objects in different ways.
- Patterns, Relations, And Functions - Relationships can be described and generalizations made for mathematical situations that have numbers or objects that repeat in predictable ways. For some relationships, mathematical expressions and equations can be used to describe how members of one set are related to members of a second set.


## Essential Question

- How can numbers up to 20 be counted, read, written, and pictured to tell how many?

| Lesson Title | Lesson Overview | Standards |
| :--- | :--- | :--- | :--- |
| Count and Write 11 and 12 | There is a unique symbol that goes with each number word. | K.CC.A.3 <br> K.CC.B.5 |
| Count and Write 13, 14, and 15 | There is a unique symbol that goes with each number word. | K.CC.A.3 <br> K.CC.B.5 |
| Count and Write 16 and 17 | There is a unique symbol that goes with each number word. | K.CC.A.3 <br> K.CC.B.5 |
| Count and Write 18, 19, and 20 | There is a unique symbol that goes with each number word. | K.CC.A.3 <br> K.CC.B.5 |
| Count Forward from any <br> number to 20 | You use the count sequence to count from any number within 20. Numbers become greater <br> when you count on. | K.CC.A.2 <br> K.CC.B.4c |

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| Count to Find How Many | Counting tells how many are in a set, regardless of their arrangement or the order in which they <br> were counted. The last number said when counting a set is the total. Counting is cumulative. | K.CC.B.5 |
| :--- | :--- | :--- |
| Math Practices \& Problem- <br> Solving: Reasoning | Good math thinkers know how to think about words and numbers to solve problems. | MP. 2 |

## HARFORD COUNTY PUBLIC SCHOOLS KINDERGARTEN MATHEMATICS CURRICULUM

## Topic 10: Compose and Decompose Numbers 11 to 19

## Primary Resource: enVisionmath2.0 Kindergarten, Savvas Learning Company, 2016.

## Enduring Understandings

- Numbers - The set of real numbers is infinite and ordered. Whole numbers, integers, and fractions are real numbers. Each real number can be associated with a unique point on the number line.
- The Base Ten Numeration System - The base ten numeration system is a scheme for recording numbers using digits 0-9, groups of ten, and place value.
- Equivalence - Any number, measure, numerical expression, algebraic expression, or equation can be represented in an infinite number of ways that have the same value.
- Patterns, Relations, and Functions - Relationships can be described and generalizations made for mathematical situations that have numbers or objects that repeat in predictable ways. For some relationships, mathematical expressions and equations can be used to describe how members of one set are related to members of a second set.


## Essential Question

- How can composing and decomposing numbers 11-19 into ten ones and some further ones help you understand place value?

| Lesson Title | Lesson Overview | Standards |
| :--- | :--- | :--- | :--- |
| Make 11,12 , and 13 | Numbers from 11 to 19 can be represented as the sum of 10 and some more. | K.NBT.A.1 |
| Make 14,15 , and 16 | Numbers from 11 to 19 can be represented as the sum of 10 and some more. | K.NBT.A.1 |
| Make 17,18 , and 19 | Numbers from 11 to 19 can be represented as the sum of 10 and some more. | K.NBT.A.1 |
| Find Parts of 11,12 , and 13 | The numbers 11,12 , and 13 can be decomposed as the sum of ten and some ones. | K.NBT.A.1 |
| Find Parts of 14,15 , and 16 | The numbers 14,15, and 16 can be decomposed as the sum of ten and some ones. | K.NBT.A.1 |
| Find Parts of 17,18 , and 19 | The numbers 17,18, and 19 can be decomposed as the sum of ten and some ones. | K.NBT.A.1 |
| Math Practices \& Problem-Solving: <br> Look for \& Use Structure | Good math thinkers look for patterns in math to help solve problems. | MP. 7 |

## HARFORD COUNTY PUBLIC SCHOOLS KINDERGARTEN MATHEMATICS CURRICULUM

## Topic 11: Count Numbers to 100

## Primary Resource: enVisionmath2.0 Kindergarten, Savvas Learning Company, 2016.

## Enduring Understandings

- Numbers - The set of real numbers is infinite and ordered. Whole numbers, integers, and fractions are real numbers. Each real number can be associated with a unique point on the number line.
- The Base Ten Numeration System - The base ten numeration system is a scheme for recording numbers using digits 0-9, groups of ten, and place value.
- Patterns, Relations, and Functions - Relationships can be described and generalizations made for mathematical situations that have numbers or objects that repeat in predictable ways. For some relationships, mathematical expressions and equations can be used to describe how members of one set are related to members of a second set.


## Essential Question

- How can numbers up to 100 be counted using a hundred chart?

| Lesson Title | Lesson Overview | Standards |
| :--- | :--- | :--- | :--- |
| Count using Patterns to 30 | Counting patterns can be seen on a hundred chart in both the rows and the columns. Some <br> patterns can also be heard when counting aloud. | K.CC.A.1 <br> K.CC.A.2 |
| Count Using Patterns to 50 | Counting patterns can be seen on a hundred chart in both the rows and the columns. Some <br> patterns can also be heard when counting aloud. | K.CC.A.1 <br> K.CC.A.2 |
| Count by Tens to 100 | Decade numbers such as 10,20, and 100 are used to name groups of ten. You can count by <br> tens to 100 by counting only the decade numbers. | K.CC.A.1 |
| Count by Tens and Ones | Decade numbers such as 10,20, and 100 are used to name groups of ten. You can count by <br> tens to 100 by counting only the decade numbers. | K.CC.A.1 <br> K.CC.A.2 |
| Count Forward from any Number <br> to 100 | Numbers are counted and written in a specific sequence on a hundred chart. | K.CC.A.1 <br> K.CC.A.2 |
| Count Using Patterns to 100 | Using counting patterns on the hundred chart can help when counting on from any number <br> from 1-100. | K.CC.A.1 <br> K.CC.A.2 |
| Math Practices and Problem- <br> Solving: Look for and use Structure | Good math thinkers look for patterns in math to solve problems. | MP.7 |

## HARFORD COUNTY PUBLIC SCHOOLS KINDERGARTEN MATHEMATICS CURRICULUM

## Topic 12: Identify and Describe Shapes

## Primary Resource: enVisionmath2.0 Kindergarten, Savvas Learning Company, 2016.

## Enduring Understandings

- Geometric Figures - Two- and three-dimensional objects with or without curved surfaces can be described, classified, and analyzed by their attributes. An object's location in space can be described quantitatively.


## Essential Question

- How can two- and three-dimensional shapes be identified and described?

| Lesson Title | Lesson Overview | Standards |
| :--- | :--- | :--- | :--- |
| Two-Dimensional (2-D) and Three- <br> Dimensional (3-D) Shapes | Objects have shape. Some objects, such as a sheet of paper or a photograph, are two- <br> dimensional or flat, shapes. Some objects, such as a ball, can, box, or jar, are three- <br> dimensional, or solid, shapes. | K.G.A. 3 |

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| Describe the Position of Shapes in the <br> Environment | The position of objects in relation to surrounding objects can be described using <br> words such as above, below, beside, in front of, behind, and next to. | K.G.A.1 |
| :--- | :--- | :--- |
| Math Practices \& Problem-Solving: <br> Precision | Good math thinkers are careful about what they write and say, so their ideas about <br> math are clear. | MP.6 |

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## Topic 13: Analyze, Compare, and Create Shapes

## Primary Resource: enVisionmath2.0 Kindergarten, Savvas Learning Company, 2016.

## Enduring Understandings

- Comparison - Numbers, expressions, measures, and objects can be compared and related to other numbers, expressions, measures, and objects in different ways.
- Geometric Figures - Two- and three-dimensional objects with or without curved surfaces can be described, classified, and analyzed by their attributes. An object's location in space can be described quantitatively.


## Essential Question

- How can solid figures be names, described, compared, and composed?

| Lesson Title | Lesson Overview | Standards |
| :--- | :--- | :--- | :--- |
| Analyze and Compare Two-Dimensional <br> (2-D) Shapes | 2-D shapes can be sorted and identified by their attributes. | K.G.B.4 |
| Analyze and Compare Three-Dimensional <br> (3-D) Shapes | Objects shaped like spheres, cones, and cylinders can roll. Objects shaped like cubes, <br> cones, and cylinders can stack and slide. | K.G.B.4 |
| Compare 2-D and 3-D Shapes | The flat surfaces of many solid figures have specific 2-D shapes. | K.G.B.4 |
| Math Practices \& Problem-Solving: <br> Making Sense and Persevere | Good math thinkers know what the problem is about. They have a plan to solve it. <br> They keep trying if they get stuck. | MP. 1 |
| Make 2-D Shapes from Other 2-D Shapes | You can make 2-D shapes by putting together two or more 2-D shapes. | K.G.B. 6 <br> K.G.B.5 |
| Build 2-D Shapes | When building a given 2-D shape, the shape must exhibit all of the attributes of the <br> shape. | K.G.B.5 <br> K.G.B.4 |
| Build 3-D Shapes | 3-D shapes can be combined to make other 3-D shapes. | K.G.B.5 <br> K.G.B. 6 |

## HARFORD COUNTY PUBLIC SCHOOLS KINDERGARTEN MATHEMATICS CURRICULUM

## Topic 14: Describe and Compare Measurable Attributes

## Primary Resource: enVisionmath2.0 Kindergarten, Savvas Learning Company, 2016.

## Enduring Understandings

- Measurement - Some attributes of objects are measurable and can be quantified using unit amounts.


## Essential Question

- How can objects be compared by length, height, capacity, and weight?

| Lesson Title | Lesson Overview | Standards |
| :--- | :--- | :--- | :--- |
| Compare by Length and Height | When you compare by length or height, you are thinking about how long or tall <br> objects are. Objects can be compared by length or height to see which <br> is longer/taller and which is shorter. | K.MD.A.2 |
| Compare by Capacity | When you compare by capacity, you are thinking about how much objects hold. <br> Objects can be compared by the capacity to see which holds more and which holds <br> less. | K.MD.A.2 |
| Compare by Weight | When you compare by weight, you are thinking about how heavy objects are. <br> Objects can be compared by weight to see which is heavier and which is lighter. | K.MD.A.2 |
| Describe Objects by Attributes | Objects have measurable attributes that can be recognized and described. | K.MD.A.1 |
| Describe Objects by Measurable <br> Attributes | Objects have measurable attributes that can be recognized and described. | K.MD.A.1 |
| Math Practices \& Problem-Solving: <br> Precision | Good math thinkers are careful about what they write and say, so their ideas about <br> math are clear. | MP.6 |

