

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 were counted. The last number said when counting a group is the total. Counting is cumulative.	K.CC.B.4a K.CC.B.5
Recognize 1, 2, and 3 in Different Arrangements	Counting tells how many are in a group, regardless of their arrangement or the order in which they were counted. The last number said when counting a group is the total. Counting is cumulative.	K.CC.B.4b 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 were counted. The last number said when counting a group is the total. Counting is cumulative.	K.CC.B.4a K.CC.B.5



Recognize 4 and 5 in Different Arrangements	Counting tells how many are in a group, regardless of their arrangement or the order in which they were counted. The last number said when counting a group is the total. Counting is cumulative.	K.CC.B.4b 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 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 K.CC.B.4
Count Numbers to 5	There is a specific order to the set of whole numbers	K.CC.B.4c K.CC.B.4a
Math Practices and Problem Solving: Construct Arguments	Good math thinkers use math to explain why they are right. They can talk about the math that others do, too.	MP.3



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 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 Counting	Two sets of objects can be compared by number using counting strategies, which is a more efficient method than matching.	K.CC.C.6 K.CC.C.7
Compare Numbers to 5	Two numbers can be compared by using the counting number sequence. A number represents a quantity greater than another quantity if it is later in the sequence.	K.CC.C.7
Math Practices and Problem Solving: Model with Math	Good math thinkers use math they know to show and solve problems.	MP.4



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 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 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 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 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 last number said when counting a group is the total. Counting is cumulative.	K.CC.B.4a K.CC.B.4b
Read and Write 10	There is a unique symbol that goes with each number word.	K.CC.A.3 K.CC.B.5



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



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



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 a particular attribute.	K.MD.B.3
Count the Number of Objects in Each Category	Objects can be classified into two categories, based on whether they have or do not have a particular attribute. Each group can then be counted.	K.MD.B.3 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 those with a particular attribute in one group and those without the attribute in another group. Then, the groups can be counted and the categories can be compared by count.	K.MD.B.3 K.CC.C.6 K.CC.C.7
Math Practices & Problem-Solving: Critique Reasoning	Good math thinkers use math to explain why they are right. They can talk about the math that others do too.	MP.3



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 images, drawings, sounds, acting out situations, verbal explanations, expressions, or 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 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 Equations	Adding parts together to make a whole is one interpretation of addition. Equations using the $+$ and $=$ can be used to show parts of a whole.	K.OA.A.1
Continue to Represent and Explain Addition with Equations	Adding parts together to make a whole is one interpretation of addition. Equations using the + and = can be used to show parts of a whole.	K.OA.A.1



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



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 images, drawings, sounds, acting out situations, verbal explanations, expressions, 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 K.OA.A.2
Use the Minus Sign	Take apart and take from subtraction situations can be shown in a subtraction expression that uses the minus sign (-).	K.OA.A.1
Represent and Explain Subtraction with Equations	Subtraction equations with $-$ and $=$ can be used to show subtraction situations.	K.OA.A.1



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



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 number is broken into two parts.	K.OA.A.3
Related Facts	Addition and subtraction facts have an inverse relationship. Equations using +, -, and = can be used to show parts of a whole.	K.OA.A.5
Math Practices & Problem-Solving: 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 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 number is broken into two parts.	K.OA.A.3



Decompose and Represent 10	Numbers can be broken apart in many ways. An addition equation can show how a number is broken into two parts.	K.OA.A.3
Solve Word Problems: Both Addends and Unknown	Objects, drawings, counting, and equations can be used to help solve addition 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



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 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 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 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 K.CC.B.5
Count Forward from any number to 20	You use the count sequence to count from any number within 20. Numbers become greater when you count on.	K.CC.A.2 K.CC.B.4c



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



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: Look for & Use Structure	Good math thinkers look for patterns in math to help solve problems.	MP.7



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 patterns can also be heard when counting aloud.	K.CC.A.1 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 patterns can also be heard when counting aloud.	K.CC.A.1 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 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 tens to 100 by counting only the decade numbers.	K.CC.A.1 K.CC.A.2
Count Forward from any Number to 100	Numbers are counted and written in a specific sequence on a hundred chart.	K.CC.A.1 K.CC.A.2
Count Using Patterns to 100	Using counting patterns on the hundred chart can help when counting on from any number from 1-100.	K.CC.A.1 K.CC.A.2
Math Practices and Problem- Solving: Look for and use Structure	Good math thinkers look for patterns in math to solve problems.	MP.7



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- Dimensional (3-D) Shapes	Objects have shape. Some objects, such as a sheet of paper or a photograph, are two-dimensional or flat, shapes. Some objects, such as a ball, can, box, or jar, are three-dimensional, or solid, shapes.	K.G.A.3
Circles and Triangles	A circle is round and does not have any corners (vertices). A triangle has 3 sides and 3 corners (vertices).	K.G.A.2 K.G.B.4
Squares and Other Rectangles	Flat shapes called rectangles have 4 sides and 4 vertices that look the same. A rectangle looks like a door. Squares are special rectangles because their sides are all the same length.	K.G.A.2 K.G.B.4
Hexagons	Six-sided flat shapes are called hexagons. These shapes can be found in objects made by people and in nature.	K.G.A.2 K.G.B.4
Solid Figures	Spheres, cylinders, cones, and cubes are solid figures. Many everyday objects closely approximate these figures.	K.G.A.2 K.G.B.4
Describe Shapes in the Environment	Objects have shape. Some objects look like flat shapes or solid shapes, including squares, rectangles, triangles, circles, hexagons, spheres, cubes, cylinders, and cones.	K.G.A.1 K.G.A.2 K.G.A.3



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



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 (2-D) Shapes	2-D shapes can be sorted and identified by their attributes.	K.G.B.4
Analyze and Compare Three-Dimensional (3-D) Shapes	Objects shaped like spheres, cones, and cylinders can roll. Objects shaped like cubes, 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: Making Sense and Persevere	Good math thinkers know what the problem is about. They have a plan to solve it. 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 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 shape.	K.G.B.5 K.G.B.4
Build 3-D Shapes	3-D shapes can be combined to make other 3-D shapes.	K.G.B.5 K.G.B.6



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 objects are. Objects can be compared by length or height to see which 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. Objects can be compared by the capacity to see which holds more and which holds less.	K.MD.A.2
Compare by Weight	When you compare by weight, you are thinking about how heavy objects are. 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 Attributes	Objects have measurable attributes that can be recognized and described.	K.MD.A.1
Math Practices & Problem-Solving: Precision	Good math thinkers are careful about what they write and say, so their ideas about math are clear.	MP.6