

# Kindergarten 2020 Unit #2: Math - Operations and Algebraic Thinking

Content Area: **Mathematics**  
Course(s): **Math 1, Generic Course**  
Time Period: **Marking Period 2**  
Length: **Marking Period 2**  
Status: **Published**

## Established Goals/Standards

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Please choose the appropriate Goals/Standards from the Standards tab above.

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|-------------|---|
| MA.K.CC.A.1 | Count to 100 by ones and by tens.   |
| MA.K.CC.A.2 | Count forward beginning from a given number within the known sequence (instead of having to begin at 1).  |
| MA.K.CC.A.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).  |
| MA.K.CC.B.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. |
| MA.K.CC.C.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.  |
| MA.K.CC.C.7 | Compare two numbers between 1 and 10 presented as written numerals.   |
| MA.K.OA.A.1 | Represent addition and subtraction up to 10 with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.  |
| MA.K.OA.A.2 | Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.  |
| MA.K.OA.A.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 $5 = 4 + 1$ ).                        |
| MA.K.OA.A.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.   |
| MA.K.OA.A.5 | Demonstrate fluency for addition and subtraction within 5.  |
| MA.K.MD.B.3 | Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.   |

## Essential Questions

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Please add your Essential Questions by clicking on the Lists tab above.

- How can representing taking apart and taking from in different ways help you learn about subtraction?
- How can solving problems in more than one way help you learn about addition and subtraction?
- What types of situations involve addition?

## Enduring Understanding

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Please add your Enduring Understandings by clicking on the Lists tab above.

- Adding one or more objects to an existing group is one interpretation of 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
- Good math thinkers know how to think about words and numbers to solve problems.
- Objects, drawings, counting and equations can be used to help solve addition problems involving unknown addends.
- Objects, drawings, counting, and equations can be used to help solve addition problems involving putting together.
- Objects, words, drawings, counting, and equations can be used to help solve subtraction problems involving taking from.
- Patterns can be used to help solve subtraction problems.
- Putting together parts to make a whole is one interpretation of addition.
- Separating parts from a whole is one interpretation of 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.
- Subtraction equations using  $-$  and  $=$  can be used to show subtraction situations.
- Taking parts from a whole is one interpretation of subtraction
- There is more than one way to show a number. An addition equation can show the parts and the whole.

## Content

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### SWBAT

show numbers in many ways.

represent addition as adding to a number.

represent addition as putting two or more numbers together.

write an equation to show addition.

solve addition problems.

use equations to represent and explain addition.

use patterns to add numbers together.

model adding different numbers together by drawing, counting or writing equations.

take apart a number and tell the parts.

represent subtraction as taking away from a whole.

write an equation to show subtraction.

find the different of two numbers.

find patterns in subtraction equations.

use tools to subtract numbers.

write an addition equation to solve a word problem.

solve related addition and subtraction equations.

reason about numbers and operations.

write addition and subtraction equations within 5 and remember them.

write an addition equation to solve a word problem.

show how to make a group of 10.

write an addition equation to solve a word problem.

#### VOCABULARY:

join, in all, part, whole, addition sentence, add, plus sign, equal sign, equation, sum, left, separate, subtraction sentence, take away, different, subtract, minus sign, break apart, operation.

## **Assessment**

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## **Resources**

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Interactive Math Story

Review What You Know

My Word Cards

Daily Review

Solve and Share Activity

Today's Challenge

Independent Practice

Math Centers

## Manipulatives