Second Grade 2020 Math Unit 1: Operations and Algebraic Thinking

Content Area: **Mathematics**
Course(s):
Time Period: **Marking Period 1**
Length: **September October**
Status: **Published**

Established Goals/Standards

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

MA.2.OA.A.1	Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.
MA.2.OA.B.2	Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers.
MA.2.OA.C.4	Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.
MA.2.NBT.A.1	Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:
MA.2.NBT.A.2	Count within 1000; skip-count by 5s, 10s, and 100s.
MA.2.NBT.A.3	Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.
MA.2.NBT.A.4	Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, and < symbols to record the results of comparisons.
MA.2.NBT.B.5	Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.
MA.2.NBT.B.8	Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.
MA.2.NBT.B.9	Explain why addition and subtraction strategies work, using place value and the properties of operations.
CAEP.9.2.4.A.4	Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.

Essential Questions

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

- What are some ways to think about addition and subtraction?
- What are strategies for finding addition facts?
- What are strategies for finding subtraction facts?
- What is the relationship between arrays and repeated addition?

Enduring Understanding

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

- Some subtraction facts can be found by subtracting from the minuend (the larger number) an amount to get to 10 and then subtracting the amount that remains

- Addition and subtraction have an inverse relationship. The inverse relationship between addition and subtraction can be used to find subtraction facts; every subtraction fact has a related addition fact

- An array involves joining equal groups and is one way to think about repeated addition

- Basic addition facts that are near doubles can be found using a related doubles fact.

- Joining parts to make a whole is one interpretation of addition. Addition and subtraction number sentences can be used to show joining and separating parts of a whole.

- Repeated addition involves joining equal groups
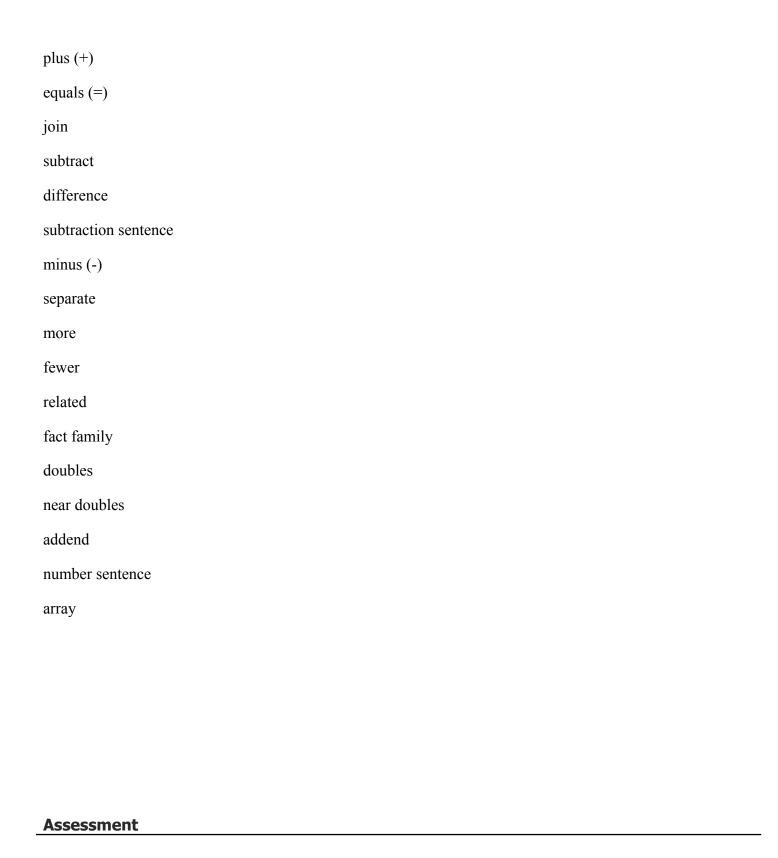
- Two numbers can be added in any order

Content

Students will be able to:

- join two groups and write addition number sentences to tell how many in all
- model joining stories and write an addition number sentence
- solve problems by writing subtraction number sentences
- write subtraction sentences to solve stories about separating groups
- write subtraction sentences to solve stories about comparing groups
- write related addition and subtraction facts
- use counters to model and solve addition and subtraction problems
- master addition facts involving 0, 1, and 2
- master addition facts in which both addends are the same
- master addition facts where the addends are 1 apart
- use the commutative property to find sums
- find the sum of three addends using any order
- find sums by making 10 when adding
- draw a picture and write a number sentence to solve a story problem

Related Vocabulary:

part

whole

add

sum

addition sentence

plus (+)

equals (=)

join

subtract

difference

subtraction sentence

minus (-)

separate

more

fewer

related

fact family

doubles

near doubles

addend

number sentence

array

Assessment

Resources

pearsonsuccess.net

enVision Math Grade 2 manual

manipulatives

visual learning animations

quick checks

practice and reteaching workbook

math centers

daily workmat

common core daily review