

# First Grade First Quarter Mathematics

## August 1-October 4

### Big Ideas/Key Concepts:

Counting is a purposeful skill that assigns a number name to an object or set of numbers.

Understanding place value leads to the development of number sense and efficient strategies for computing with numbers.

Mathematical operations are used in solving problems in which a new value is produced from one or more values.

Algebraic thinking involves choosing, combining, and applying effective strategies for answering quantitative questions.

Students will count by rote and demonstrate one-to-one correspondence, as well as demonstrate that numbers stand for an amount of something.

Students will be able to compare numbers using the words less than, greater than or equal to another.

Students will be able to use positional words to describe objects.

Students will be able to show their mathematical thinking by using writings, drawings, and/or equations.

### Mathematical Practices

### Student Friendly "I Can" Statements

### Resources

*All practices should be embedded in instruction throughout the 4 quarters.*

**MP1.** Make sense of problems and persevere in solving them.

**I can** make a plan to solve a problem without giving up.

[Read Tennessee MP.1](#)

**MP2.** Reason abstractly and quantitatively.

**I can** use numbers and words to help me understand math problems.

[Read Tennessee MP.2](#)

**MP3.** Construct viable arguments and critique the reasoning of others.

**I can** explain my answers and listen to my friends' ideas, too.

[Read Tennessee MP.3](#)

**MP4.** Model with mathematics.

**I can** show what I know in different ways such as using objects, making drawings, writing words and writing number sentences.

[Read Tennessee MP.4](#)

**MP5.** Use appropriate tools strategically.

**I can** use different tools to help understand math.

[Read Tennessee MP.5](#)

**MP6.** Attend to precision.

**I can** check my work to see if it is reasonable.  
**I can** tell about my work using correct math terms.

[Read Tennessee MP.6](#)

**MP7.** Look for and make use of structure.

**I can** find and use patterns in numbers and shapes to help me solve problems.

[Read Tennessee MP.7](#)

**MP8.** Look for and express regularity in repeated reasoning.

**I can** find and use patterns in problems that are alike to make short cuts for solving them.

[Read Tennessee MP.8](#)

### Content Standards

### Student Friendly “I Can” Statements

### Resources

**1. NBT. A.1** Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.

I can write the number for a given amount of objects to 120.

I can count for 1 to 120.

I can count to 120 starting at any number less than 120.

I can read and write numbers to 120.

#### EnVision Topics:

Topic 1: Numbers 1-12

Topic 10: Counting and Number Patterns to 100

#### Resources:

[Read Tennessee 1.NBT.A.1](#)

[Internet 4 Classrooms 1.NBT.A.1](#)

[Math IXL](#)

[Extending the counting sequence](#)

[Blank 120's chart](#)

**1. OA.C.5** Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).

I can count on to add.

I can count backward to subtract. (Example: 10-3 can be found by counting down from 10 to 3).

I can count up to subtract. (Example: 10-3 can be found by counting up from 3 to 10).

I can use a number line to show addition and subtraction as counting on or counting back.

I can use a hundreds chart to show addition as moving left to right.

I can use a hundreds chart to show addition as moving right to left.

#### EnVision Topics:

Topic 6: Addition Facts to 12

Topic 7: Subtraction Facts to 12

#### Resources:

[Read Tennessee 1.OA.C.5](#)

[Internet 4 Classrooms 1.OA.C.5](#)

[Math IXL](#)

[The Very Hungry Caterpillar Task](#)

[One More, One Less Scoop](#)

[One More on the Ten Frame](#)

[Show One Less](#)

[Show One More](#)

[I Have, Who Has Math Facts](#)

[Adding on a 100 chart](#)

[Fruit Shooter Subtraction](#)

[Create Your Own Math Number Line Sheets](#)

**1.OA.A.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.**

I can determine if I need to add or subtract in a word problem with unknowns.

I can solve addition word problems using objects, drawings, and equations with a symbol within 20.

I can solve subtraction word problems using objects, drawings, and equations with a symbol within 20.

I can solve addition and subtraction problems where the result is unknown.

I can represent an unknown number in a problem using a symbol. ( $?$ ,  $x$ ,  $\_$ )

**EnVision Topics:**

Topic 3: Understanding Addition

Topic 4: Understanding Subtraction

Topic 6: Addition Facts to 12

Topic 7: Subtraction Facts to 12

Topic 16: Addition Facts to 18

Topic 17: Subtraction Facts to 18

**Resources:**

[Read Tennessee 1.OA.A.1](#)

[Internet 4 Classrooms 1.OA.A.1](#)

[Math IXL](#)

[Addition Word Problems](#)

[Subtraction Word Problems](#)

[Add to Change Unknown Problems](#)

[Add to Start Unknown Problems](#)

[Bunk Bed Problem](#)

[Double Decker Bus Problem](#)

[Making Apple Ten Packs](#)

[Put Together, Take Apart](#)

[Add to Change Unknown](#)

**1.OA.B.4 Understand subtraction as an unknown-addend problem. For example, subtract  $10-8$  by finding the number that makes 10 when added to 8.**

I can apply related facts to solve problems that have an unknown value.

I can give an example and explain how a subtraction equation can be rewritten as an

**EnVision Topics:**

Topic 4: Understanding Subtraction

Topic 5: Five and Ten Relationships

Topic 7: Subtraction Facts to 12

addition equation.

I can rewrite a subtraction equation as an addition equation with a missing addend.

Topic 17: Subtraction Facts to 18

**Resources:**

[Read Tennessee 1.OA.B.4](#)

[Internet 4 Classrooms 1.OA.B.4](#)

[Math IXL](#)

[Take Apart Addend Unknown](#)

[Take Apart Addend Unknown #2](#)

[Ten Frame Subtraction](#)

**1.OA.C.6** Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g.,  $8 + 6 = 8 + 2 + 4 = 10 + 4 = 14$ ); decomposing a number leading to a ten (e.g.,  $13 - 4 = 13 - 3 - 1 = 10 - 1 = 9$ ); using the relationship between addition and subtraction (e.g., knowing that  $8 + 4 = 12$ , one knows  $12 - 8 = 4$ ); and creating equivalent but easier or known sums (e.g., adding  $6 + 7$  by creating the known equivalent  $6 + 6 + 1 = 12 + 1 = 13$ ).

I can fluently add and subtract within 10.

I can add and subtract within 20 by counting on and making a ten.

I can add and subtract within 20 by using equal but easier numbers (e.g., doubles, doubles plus one, doubles minus one).

I can fluently add and subtract within 20 using the following strategies:

- Ten Frames
- Hundreds Chart
- Number Line
- Drawing Pictures
- Part-Part-Whole Mat
- Using manipulatives

**EnVision Topics:**

Topic 4: Understanding Subtraction

Topic 6: Addition Facts to 12

Topic 7: Subtraction Facts to 12

Topic 16: Addition Facts to 18

Topic 17: Subtraction Facts to 18

**Resources:**

[Read Tennessee 1.OA.C.6](#)

[Internet 4 Classrooms 1.OA.C.6](#)

[Math IXL](#)

[Math Facts Pro](#)

[Math Facts Monster](#)

[Illuminations Ten Frames](#)

[Ten Frames and Dot Cards](#)

[Hundreds Chart](#)

[Part-Part-Whole Mat](#)

[National Library of Virtual Manipulatives](#)

[Doubles Facts](#)

[Ten Frame Fill](#)

[Fact Family House](#)

**1.OA.B.3 Apply properties of operations as strategies to add and subtract. Examples: If  $8 + 3 = 11$  is known, then  $3 + 8 = 11$  is also known. (Commutative property of addition) To add  $2 + 6 + 4$ , the second two numbers can be added to make a ten, so  $2 + 6 + 4 = 2 + 10 = 12$ . (Associative property of addition) (No formal terminology is necessary from students).**

I can demonstrate that changing the order of the addends (numbers) does not change the sum (ex:  $8+3=11$  and  $3+8=11$ ).

I can choose two of the numbers, when adding more than two numbers, which will easily add to a benchmark value to help find the sum. (Associative property of addition)

[Domino Addition](#)  
[Math Fact Sort](#)  
[Make Ten](#)  
[Four in a Row Subtraction](#)

**Envision Topics:**

Topic 6: Addition Facts to 12  
Topic 16: Addition Facts to 18

**Resources:**

[Read Tennessee 1.OA.B.3](#)  
[Internet 4 Classrooms 1.OA.B.3](#)  
[Math IXL](#)  
[Turn Around Trains](#)  
[Turn Around Dominoes](#)  
[Domino Fact Families](#)  
[Properties Task](#)  
[Properties Task 2](#)

**Other Resources:**

[Addition Strategy Posters](#)  
[Subtraction Strategy Posters](#)  
[Curriculum Page](#)