

# Unit 4 Reveal Grade 1


Content Area: **Math**  
 Course(s): **Math**  
 Time Period: **November**  
 Length: **4 weeks**  
 Status: **Published**

## Unit Overview

### UNIT 4 PLANNER

### Addition within 20: Facts and Strategies

PACING: 17 days

LESSON	MATH OBJECTIVE	LANGUAGE OBJECTIVE	SOCIAL AND EMOTIONAL LEARNING OBJECTIVE	LESSON	KEY VOCABULARY
<b>Unit Opener</b>  <b>Missing Numbers in Shapes</b> Explore addition facts while trying to solve puzzles.					
<b>4-1</b> <a href="#">Relate Counting to Addition</a>	Students understand (explain) that addition is a more efficient way of determining a total.	Students use interrogative expressions with <i>how many</i> to show that addition is a more efficient way of finding a total.	Students identify personal traits that make them good students, peers, and math learners.	<b>4-1</b>	Math Terms add addend sum
<b>4-2</b> <a href="#">Count On to Add</a>	Students select one addend to start with and count on by the value of the second addend.	Students use the command form of verbs to explain how to select one addend to start with and count on.	Students actively listen without interruption as peers describe how they approached a complex task.	<b>4-2</b>	add addend sum
<b>4-3</b> <a href="#">Doubles</a>	Students use doubles to add numbers within 20.	Students use <i>when</i> while defining how to use doubles to add numbers within 20.	Students set learning goals and initiate work on tasks to accomplish their goals.	<b>4-3</b>	add addend doubles sum
<b>4-4</b> <a href="#">Near Doubles</a>	Students use doubles facts they know to solve near-doubles problems.	Students respond to <i>Wh</i> questions with doubles facts they know to solve near-doubles problems.	Students exchange ideas for mathematical problem-solving with a peer, listening attentively and providing thoughtful and constructive feedback.	<b>4-4</b>	add addend doubles sum
<b>4-5</b> <a href="#">Make a 10 to Add</a>	Students use make a 10 strategy to solve addition equations within 20.	Students share how to use the make a 10 strategy to solve addition equations within 20 using <i>can</i> .	Students identify and discuss the emotions experienced during math learning.	<b>4-5</b>	add, addend number bond sum, ten-frame
<b>4-6</b> <a href="#">Choose Strategies to Add</a>	Students choose an efficient strategy to solve an equation.	Students use past tense verbs to explain an efficient strategy chosen to solve an equation.	Students determine the strategies and analyses necessary to make informed decisions when engaging in mathematical practices.	<b>4-6</b>	add addend sum
<b>4-7</b> <a href="#">Use Properties to Add</a>	Students add numbers in any order.	Students express certainty using <i>will</i> when responding to questions about numbers added in any order.	Students discuss and practice strategies for managing stressful situations.	<b>4-7</b>	add addend sum
<b>Math Probe</b> <a href="#">Solving Problems</a> Gather data on students' understanding of addition strategies.					
<b>4-8</b> <a href="#">Add Three Numbers</a>	Students explain strategies for adding 3 numbers.	Students use <i>can</i> to explain strategies for adding 3 numbers.	Students collaborate with peers to complete a mathematical task and offer constructive feedback to the mathematical ideas posed by others.	<b>4-8</b>	add addend sum
<b>4-9</b> <a href="#">Find an Unknown Number in an Addition Equation</a>	Students use different strategies to determine an unknown value in an addition equation.	Students use the conjunctions <i>and/or</i> to identify different strategies to determine an unknown value.	Students identify a problem, use creativity to execute problem solving steps, and identify multiple solutions.	<b>4-9</b>	add addend sum unknown
<b>4-10</b> <a href="#">Understand the Equal Sign</a>	Students explain the meaning of the equal sign.	Students explain the meaning of the equal sign using the verb <i>have</i> .	Students employ techniques that can be used to help maintain focus and manage reactions to potentially frustrating situations.	<b>4-10</b>	add addend equal sign sum
<b>4-11</b> <a href="#">True Addition Equations</a>	Students determine whether an addition equation is true or false.	Students respond to whether an addition equation is true or false using <i>so</i> to express a logical consequence.	Students recognize and work to understand the emotions of others and practice empathetic responses.	<b>4-11</b>	add addend equation sum
<b>Unit Review</b>					
<b>Fluency Practice</b>					
<b>Unit Assessment</b>					
<b>Performance Task</b>					

## Enduring Understandings

See Above

## Essential Questions

See Above

## Instructional Strategies and Learning Activities

LESSON 4-1

Relate Counting to Addition

Learning Targets

- I can understand that addition is a more efficient way of determining a total.
- I can explain why addition is a more efficient way of determining a total than by counting.

Standards

Major

Supporting

Additional

Content

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

Math Practices and Processes

MPP

Model with mathematics.

MPP

Use appropriate tools strategically.

Focus

Content Objective

- Students understand (explain) that addition is a more efficient way of determining a total.

Language Objectives

- Students use interrogative expressions with *how/many/* to ask for quantities to identify that addition is a more efficient way of determining a total.
- In order to optimize output, ELs will participate in MLHt: Information Gap.

SEL Objective

- Students identify personal traits that make them good students, peeces, and math learners.

Coherence

Previous

- Students fluently added and subtracted within 5. (Grade K)
- Students explored counting patterns to 120. (Unit 2)

Now

- Students relate addition to counting to determine that addition is a more efficient way to find a total.

Next

- Students create equivalent but easier or known sums to add. (Unit 4)
- Students use addition within 100 to solve one- and two-step word problems. (Grade 2)

Rigor

Conceptual Understanding

- Students understand that addition is a more efficient way of determining a total than by counting.

Procedural Skill & Fluency

- Students work to understand why adding is more efficient than counting to determine a total.

Procedural skill & fluency is not a targeted element of rigor for this standard.

Application

- Students count and add to solve contextual problems.

Application is not a targeted element of rigor for this standard.

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Unit 4 • Addition within 20: Facts and Strategies

## LESSON 4-2

# Count On to Add

### Learning Targets

- I can count on to add within 20.
- I can use a number line to add.

### Standards • Major • Supporting • Additional

#### Content

- ◊ **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; decomposing a number leading to ten; using the relationship between addition and subtraction; and creating equivalent but easier or known sums.

#### Math Practices and Processes

**MPP** Use appropriate tools strategically.

**MPP** Model with mathematics.

### Focus

Content Objective	Language Objectives	SEL Objective
<ul style="list-style-type: none"> <li>• Students select one addend to start with and count on by the value of the other addend.</li> </ul>	<ul style="list-style-type: none"> <li>• Students use the command form of verbs to explain how to select one addend to start with and count on by the value of the second addend.</li> <li>• In order to support sense-making and cultivate conversation, ELs will participate in MUR3: Critique, Correct, and Clarify.</li> </ul>	<ul style="list-style-type: none"> <li>• Students actively listen without interruption as peers describe how they approached a complex mathematical task.</li> </ul>

### Coherence

Previous	Now	Next
<ul style="list-style-type: none"> <li>• Students counted objects and represented numbers of objects. (Grade K)</li> <li>• Students identified patterns on a number line. (Unit 2)</li> </ul>	<ul style="list-style-type: none"> <li>• Students use a number line and start with one addend then count on by the value of the second addend to find a sum.</li> </ul>	<ul style="list-style-type: none"> <li>• Students use doubles to add numbers within 20. (Unit 4)</li> <li>• Students use addition within 100 to solve one- and two-step word problems. (Grade 2)</li> </ul>

### Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
<ul style="list-style-type: none"> <li>• Students build their understanding of addition as they use number lines to add.</li> </ul>	<ul style="list-style-type: none"> <li>• Students build proficiency with addition as they practice using number lines to show addition.</li> </ul>	<ul style="list-style-type: none"> <li>• Students apply their understanding of addition to solve problems with real-world contexts.</li> </ul> <p><i>Application is not a targeted element of rigor for this standard.</i></p>

## LESSON 4-3

# Doubles

## Learning Targets

- I can use doubles to add numbers within 20.
- I can demonstrate how to use doubles to add when the addends are the same.

## Standards • Major • Supporting • Additional

### Content

- ◊ **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; decomposing a number leading to ten; using the relationship between addition and subtraction; and creating equivalent but easier or known sums.

### Math Practices and Processes

**MPP** Reason abstractly and quantitatively.

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

## Focus

Content Objective	Language Objectives	SEL Objective
<ul style="list-style-type: none"> <li>• Students use doubles to add numbers within 20.</li> </ul>	<ul style="list-style-type: none"> <li>• Students use <i>when while</i> defining how to use doubles to add numbers within 20.</li> <li>• In order to optimize output, ELs will participate in MLIT: Stronger and Clearer Each Time.</li> </ul>	<ul style="list-style-type: none"> <li>• Students set learning goals and initiate work on tasks to accomplish their goals.</li> </ul>

## Coherence

Previous	Now	Next
<ul style="list-style-type: none"> <li>• Students fluently added and subtracted within 5. (Grade K)</li> <li>• Students used strategies, such as counting on, to add within 20. (Unit 4)</li> </ul>	<ul style="list-style-type: none"> <li>• Students use strategies involving doubles to add within 20.</li> </ul>	<ul style="list-style-type: none"> <li>• Students use doubles facts to help them add. (Unit 4)</li> <li>• Students use addition within 100 to solve one- and two-step word problems. (Grade 2)</li> </ul>

## Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
<ul style="list-style-type: none"> <li>• Students understand how using doubles can help them to add within 20.</li> </ul>	<ul style="list-style-type: none"> <li>• Students develop strategies to use doubles to help them add within 20.</li> </ul>	<ul style="list-style-type: none"> <li>• Students use doubles to solve contextual problems.</li> </ul> <p><i>Application is not a targeted element of rigor for this standard.</i></p>

## LESSON 4-4

# Near Doubles

### Learning Targets

- I can use doubles to find out facts I do not know.
- I can explain how doubles can help me solve near-doubles problems.

### Standards • Major • Supporting • Additional

#### Content

- ◊ **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; decomposing a number leading to ten; using the relationship between addition and subtraction; and creating equivalent but easier or known sums.

#### Math Practices and Processes

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

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

### Focus

Content Objective	Language Objectives	SEL Objective
<ul style="list-style-type: none"> <li>• Students use doubles facts they know to solve near-doubles problems.</li> </ul>	<ul style="list-style-type: none"> <li>• Students respond to Wh questions with doubles facts they know to solve near-doubles problems.</li> <li>• In order to maximize linguistic and cognitive meta-awareness and optimize output, ELs will participate in MLR4 Information Gap.</li> </ul>	<ul style="list-style-type: none"> <li>• Students exchange ideas for mathematical problem-solving with a peer, listening attentively and providing thoughtful and constructive feedback.</li> </ul>

### Coherence

Previous	Now	Next
<ul style="list-style-type: none"> <li>• Students fluently added and subtracted within 5. (Grade K)</li> <li>• Students used doubles facts to help build fluency with addition. (Unit 4)</li> </ul>	<ul style="list-style-type: none"> <li>• Students use doubles facts they know to solve near-doubles problems.</li> </ul>	<ul style="list-style-type: none"> <li>• Students choose strategies to add. (Unit 4)</li> <li>• Students use addition within 100 to solve one- and two-step word problems. (Grade 2)</li> </ul>

### Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
<ul style="list-style-type: none"> <li>• Students understand how using doubles can help them to add near doubles.</li> </ul> <p><i>Conceptual understanding is not a targeted element of rigor for this standard.</i></p>	<ul style="list-style-type: none"> <li>• Students build fluency with addition by using known facts to 20.</li> </ul>	<ul style="list-style-type: none"> <li>• Students use near doubles to solve contextual problems.</li> </ul> <p><i>Application is not a targeted element of rigor for this standard.</i></p>

## LESSON 4-5

# Make a 10 to Add

### Learning Targets

- I can use ten frames to add.
- I can explain how my ten frames match a problem.

### Standards • Major • Supporting • Additional

#### Content

- ◊ **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; decomposing a number leading to ten; using the relationship between addition and subtraction; and creating equivalent but easier or known sums.

#### Math Practices and Processes

- MPP** Reason abstractly and quantitatively.
- MPP** Use appropriate tools strategically.

### Focus

Content Objective	Language Objectives	SEL Objective
<ul style="list-style-type: none"> <li>• Students use make a 10 strategy to solve addition equations within 20.</li> </ul>	<ul style="list-style-type: none"> <li>• Students share how to use the make a 10 strategy to solve addition equations within 20 using <i>con</i>.</li> <li>• In order to cultivate conversation, ELs will participate in MLRS: Co-Craft Questions and Problems.</li> </ul>	<ul style="list-style-type: none"> <li>• Students identify and discuss the emotions experienced during math learning.</li> </ul>

### Coherence

Previous	Now	Next
<ul style="list-style-type: none"> <li>• Students found the number that makes 10 when added to the given number. (Grade K)</li> <li>• Students counted on to add within 20. (Unit 4)</li> </ul>	<ul style="list-style-type: none"> <li>• Students use ten frames or number bonds to add within 20.</li> </ul>	<ul style="list-style-type: none"> <li>• Students understand that the order two addends are added does not change the sum. (Unit 4)</li> <li>• Students fluently add within 20 using mental strategies. (Grade 2)</li> </ul>

### Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
<ul style="list-style-type: none"> <li>• Students build on their understanding of addition by defining it as combining to find a total.</li> </ul> <p><i>Conceptual understanding is not a targeted element of rigor for this standard.</i></p>	<ul style="list-style-type: none"> <li>• Students build skill in addition within twenty by using ten frames to solve addition problems.</li> </ul>	<ul style="list-style-type: none"> <li>• Students apply their understanding of using a ten frame to solve addition problems.</li> </ul> <p><i>Application is not a targeted element of rigor for this standard.</i></p>

## LESSON 4-6

# Choose Strategies to Add

## Learning Targets

- I can choose a strategy to add.
- I can explain which strategy I used to add.

## Standards • Major ▲ Supporting • Additional

### Content

- ◊ **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; decomposing a number leading to ten; using the relationship between addition and subtraction; and creating equivalent but easier or known sums.

### Math Practices and Processes

- MPP** Use appropriate tools strategically.
- MPP** Construct viable arguments and critique the reasoning of others.

## Focus

Content Objective	Language Objectives	SEL Objective
<ul style="list-style-type: none"> <li>• Students choose an efficient strategy to solve an equation.</li> </ul>	<ul style="list-style-type: none"> <li>• Students use past tense verbs to explain an efficient strategy chosen to solve an equation.</li> <li>• In order to support sense-making and maximize linguistic and cognitive meta-awareness, ELs will participate in MLR2: Compare and Connect.</li> </ul>	<ul style="list-style-type: none"> <li>• Students determine the strategies and analyses necessary to make informed decisions when engaging in mathematical practices.</li> </ul>

## Coherence

Previous	Now	Next
<ul style="list-style-type: none"> <li>• Students understood addition as putting together and adding to. (Grade K)</li> <li>• Students used the make a 10 strategy to add. (Unit 4)</li> </ul>	<ul style="list-style-type: none"> <li>• Students choose a strategy to add.</li> </ul>	<ul style="list-style-type: none"> <li>• Students use strategies to add three numbers. (Unit 4)</li> <li>• Students use addition within 100 to solve one- and two-step word problems. (Grade 2)</li> </ul>

## Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
<ul style="list-style-type: none"> <li>• Students build on their understanding of addition by choosing a strategy.</li> </ul>	<ul style="list-style-type: none"> <li>• Students build skill in addition within twenty by choosing a strategy to add.</li> </ul>	<ul style="list-style-type: none"> <li>• Students apply their understanding of choosing a strategy to add.</li> </ul> <p><i>Application is not a targeted element of rigor for this standard.</i></p>

## LESSON 4-7

# Use Properties to Add

## Learning Targets

- I can add numbers in any order.
- I can explain why numbers can be added in any order.

## Standards • Major ▲ Supporting ● Additional

### Content

- ◊ **1.OA.B.3** Apply properties of operations 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.)

### Math Practices and Processes

**MPP** Use appropriate tools strategically.

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

## Focus

Content Objective	Language Objectives	SEL Objective
<ul style="list-style-type: none"> <li>• Students add numbers in any order.</li> </ul>	<ul style="list-style-type: none"> <li>• Students express certainty using <i>will</i> when responding to questions about numbers added in any order.</li> <li>• In order to cultivate conversation, ELs will participate in MLR2: Compare and Connect.</li> </ul>	<ul style="list-style-type: none"> <li>• Students discuss and practice strategies for managing stressful situations.</li> </ul>

## Coherence

Previous	Now	Next
<ul style="list-style-type: none"> <li>• Students understood addition as putting together. (Grade K)</li> <li>• Students used strategies to add within 20. (Unit 4)</li> </ul>	<ul style="list-style-type: none"> <li>• Students apply properties of operations to add.</li> <li>• Students understand that the order of addends in an addition problem does not change the sum.</li> </ul>	<ul style="list-style-type: none"> <li>• Students add three numbers whose sum is less than or equal to 20. (Unit 4)</li> <li>• Students use addition within 100 to solve one- and two-step word problems. (Grade 2)</li> </ul>

## Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
<ul style="list-style-type: none"> <li>• Students build their understanding of how to use the commutative property of addition to add numbers in any order.</li> </ul>	<ul style="list-style-type: none"> <li>• Students build proficiency using the commutative property of addition to add numbers in any order.</li> </ul> <p><i>Procedural skill &amp; fluency is not a targeted element of rigor for this standard.</i></p>	<ul style="list-style-type: none"> <li>• Students apply their understanding of the commutative property of addition to add numbers in real-world contexts.</li> </ul> <p><i>Application is not a targeted element of rigor for this standard.</i></p>



## LESSON 4-8

# Add Three Numbers

## Learning Targets

- I can add three numbers.
- I can use strategies to decide how to add three numbers.

## Standards • Major ▲ Supporting • Additional

### Content

- ◇ **1.OA.A.2** Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20.
- ◇ **1.OA.B.3** Apply properties of operations to add and subtract.

### Math Practices and Processes

**MPP** Reason abstractly and quantitatively.

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

## Focus

### Content Objective

- Students explain strategies for adding 3 numbers.

### Language Objectives

- Students use *can* to explain strategies for adding 3 numbers.
- In order to maximize linguistic and cognitive meta-awareness and optimize output, ELs will participate in ML&I: Information Gap.

### SEL Objective

- Students collaborate with peers to complete a mathematical task and offer constructive feedback to the mathematical ideas posed by others.

## Coherence

### Previous

- Students understood addition as putting together. (Grade K)
- Students understood the order of addends in an addition problem does not change the sum. (Unit 4)

### Now

- Students apply properties of operations to add.
- Students add three whole numbers whose sum is less than or equal to 20.

### Next

- Students determine the unknown whole number in an addition equation. (Unit 4)
- Students use addition within 100 to solve one- and two-step word problems. (Grade 2)

## Rigor

### Conceptual Understanding

- Students build on their understanding of addition strategies to add three addends.

*Conceptual understanding is not a targeted element of rigor for this standard.*

### Procedural Skill & Fluency

- Students build proficiency in using appropriate strategies when adding three numbers.

*Procedural skill & fluency is not a targeted element of rigor for this standard.*

### Application

- Students apply their understanding of various addition strategies to add three numbers.

## LESSON 4-9

# Find an Unknown Number in an Addition Equation

## Learning Targets

- I can find the unknown number in an addition equation.
- I can explain how three numbers in an addition equation are related.

## Standards • Major ▲ Supporting • Additional

### Content

- ◊ **1.OA.D.8** Determine the unknown whole number in an addition or subtraction equation relating three whole numbers.

### Math Practices and Processes

- MPP** Model with mathematics.
- MPP** Use appropriate tools strategically.

## Focus

Content Objective	Language Objectives	SEL Objective
<ul style="list-style-type: none"> <li>• Students use different strategies to determine an unknown value in an addition equation.</li> </ul>	<ul style="list-style-type: none"> <li>• Students use the conjunctions <i>and</i> and <i>or</i> to identify different strategies to determine an unknown value in an addition equation.</li> <li>• In order to cultivate conversation, ELs will participate in MLRS Co-Craft Questions and Problems.</li> </ul>	<ul style="list-style-type: none"> <li>• Students identify a problem, use creativity to execute problem-solving steps, and identify multiple solutions.</li> </ul>

## Coherence

Previous	Now	Next
<ul style="list-style-type: none"> <li>• Students solved addition and subtraction equations within 10. (Grade K)</li> <li>• Students solved addition equations. (Unit 4)</li> </ul>	<ul style="list-style-type: none"> <li>• Students solve addition equations when either one of the addends or the sum is unknown.</li> </ul>	<ul style="list-style-type: none"> <li>• Students solve subtraction equations when the minuend, the subtrahend, or difference is unknown. (Unit 5)</li> <li>• Students make equations as a strategy to help them solve addition and subtraction problems. (Grade 2)</li> </ul>

## Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
<ul style="list-style-type: none"> <li>• Students build on their own understanding of addition to find unknown values in addition equations.</li> </ul>	<ul style="list-style-type: none"> <li>• Students build fluency with addition facts while finding unknown addends or sums.</li> </ul> <p><i>Procedural skill &amp; fluency is not a targeted element of rigor for this standard.</i></p>	<ul style="list-style-type: none"> <li>• Students apply their understanding of addition equations to solve for an unknown number.</li> </ul> <p><i>Application is not a targeted element of rigor for this standard.</i></p>

## LESSON 4-10

# Understand the Equal Sign

## Learning Targets

- I can decide whether two amounts are equal.
- I can explain the meaning of the equal sign.

## Standards • Major ▲ Supporting • Additional

### Content

- ◊ **1.OA.D.7** Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false.

### Math Practices and Processes

**MPP** Reason abstractly and quantitatively.

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

## Focus

Content Objective	Language Objectives	SEL Objective
<ul style="list-style-type: none"> <li>• Students explain the meaning of the equal sign.</li> </ul>	<ul style="list-style-type: none"> <li>• Students explain the meaning of the equal sign using the verb <i>have</i>.</li> <li>• In order to support sense-making and optimize output, ELs will participate in MLR2: Compare and Connect.</li> </ul>	<ul style="list-style-type: none"> <li>• Students employ techniques that can be used to help maintain focus and manage reactions to potentially frustrating situations.</li> </ul>

## Coherence

Previous	Now	Next
<ul style="list-style-type: none"> <li>• Students fluently added and subtracted within 5. (Grade K)</li> <li>• Students analyzed number patterns. (Unit 2)</li> </ul>	<ul style="list-style-type: none"> <li>• Students understand the meaning of the equal sign in equations.</li> </ul>	<ul style="list-style-type: none"> <li>• Students use equal signs in subtraction equations. (Unit 5)</li> <li>• Students use equations to show addition within 100. (Grade 2)</li> </ul>

## Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
<ul style="list-style-type: none"> <li>• Students build on their understanding of addition as they begin to analyze if equations are true.</li> </ul>	<ul style="list-style-type: none"> <li>• Students build proficiency with addition as they understand the meaning of the equal sign.</li> </ul>	<ul style="list-style-type: none"> <li>• Students apply their understanding of equal signs to read and check addition equations.</li> </ul> <p><i>Application is not a targeted element of rigor for this standard.</i></p>

## LESSON 4-11

# True Addition Equations

## Learning Targets

- I can determine whether an addition equation is true or false.
- I can explain that in a true equation, the values on each side of the equal sign must be equal.

## Standards • Major • Supporting • Additional

### Content

- ◊ **1.OA.D.7** Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false?  $6 = 6$ ,  $7 = 8 - 1$ ,  $5 + 2 = 2 + 5$ ,  $4 + 1 = 5 + 2$ .

### Math Practices and Processes

- MPP** Model with mathematics.
- MPP** Look for and make use of structure.

## Focus

Content Objective	Language Objectives	SEL Objective
<ul style="list-style-type: none"> <li>• Students determine whether an addition equation is true or false.</li> </ul>	<ul style="list-style-type: none"> <li>• Students respond to whether an addition equation is true or false using so to express a logical consequence.</li> <li>• In order to cultivate conversation, ELs will participate in MLR3: Critique, Correct, and Clarify.</li> </ul>	<ul style="list-style-type: none"> <li>• Students recognize and work to understand the emotions of others and practice empathetic responses.</li> </ul>

## Coherence

Previous	Now	Next
<ul style="list-style-type: none"> <li>• Students represented addition with objects, expressions, or equations. (Grade K)</li> <li>• Students explained the meaning of the equal sign. (Unit 4)</li> </ul>	<ul style="list-style-type: none"> <li>• Students know when an addition equation is true or false.</li> </ul>	<ul style="list-style-type: none"> <li>• Students use addition to subtract. (Unit 5)</li> <li>• Students use addition within 100 to solve one- and two-step word problems. (Grade 2)</li> </ul>

## Rigor

Conceptual Understanding	Procedural Skill & Fluency	Application
<ul style="list-style-type: none"> <li>• Students build on their understanding of addition by determining if an addition equation is true.</li> </ul>	<ul style="list-style-type: none"> <li>• Students build skill in addition within twenty by adding on each side of an equation to determine if the equation is true.</li> </ul>	<ul style="list-style-type: none"> <li>• Students apply their understanding of adding to determine if an equation is true.</li> </ul> <p><i>Application is not a targeted element of rigor for this standard.</i></p>

## Integration of Career Readiness, Life Literacies and Key Skills

PFL.9.1.2.CR.1	Recognize ways to volunteer in the classroom, school and community.
PFL.9.1.2.CR.2	List ways to give back, including making donations, volunteering, and starting a business.
PFL.9.1.2. FI.1	Differentiate the various forms of money and how they are used (e.g., coins, bills, checks, debit and credit cards).
PFL.9.1.2.FP.1	Explain how emotions influence whether a person spends or saves.
PFL.9.1.2.FP.3	Identify the factors that influence people to spend or save (e.g., commercials, family, culture, society).

PFL.9.1.2.PB.1	Determine various ways to save and places in the local community that help people save and accumulate money over time.
PFL.9.1.2.PB.2	Explain why an individual would choose to save money.
TECH.9.4.2.CI.1	Demonstrate openness to new ideas and perspectives (e.g., 1.1.2.CR1a, 2.1.2.EH.1, 6.1.2.CivicsCM.2).
TECH.9.4.2.CI.2	Demonstrate originality and inventiveness in work (e.g., 1.3A.2CR1a).
TECH.9.4.2.CT.2	Identify possible approaches and resources to execute a plan (e.g., 1.2.2.CR1b, 8.2.2.ED.3).
TECH.9.4.2.CT.3	Use a variety of types of thinking to solve problems (e.g., inductive, deductive).
TECH.9.4.2.DC.3	Explain how to be safe online and follow safe practices when using the internet (e.g., 8.1.2.NI.3, 8.1.2.NI.4).
TECH.9.4.2.DC.6	Identify respectful and responsible ways to communicate in digital environments.
TECH.9.4.2.DC.7	Describe actions peers can take to positively impact climate change (e.g., 6.3.2.CivicsPD.1).
TECH.9.4.2.TL.2	Create a document using a word processing application.
TECH.9.4.2.TL.5	Describe the difference between real and virtual experiences.
TECH.9.4.2.TL.6	Illustrate and communicate ideas and stories using multiple digital tools (e.g., SL.2.5.).
TECH.9.4.2.TL.7	Describe the benefits of collaborating with others to complete digital tasks or develop digital artifacts (e.g., W.2.6., 8.2.2.ED.2).

## Technology and Design Integration

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CS.K-2.8.1.2.AP.4	Break down a task into a sequence of steps.
CS.K-2.8.1.2.AP.5	Describe a program's sequence of events, goals, and expected outcomes.
CS.K-2.8.1.2.CS.1	Select and operate computing devices that perform a variety of tasks accurately and quickly based on user needs and preferences.
CS.K-2.8.1.2.DA.1	Collect and present data, including climate change data, in various visual formats.
CS.K-2.8.1.2.DA.3	Identify and describe patterns in data visualizations.
CS.K-2.8.1.2.DA.4	Make predictions based on data using charts or graphs.
CS.K-2.8.2.2.ITH.4	Identify how various tools reduce work and improve daily tasks.

## Interdisciplinary Connections

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LA.RI.1.1	Ask and answer questions about key details in a text.
LA.RI.1.2	Identify the main topic and retell key details of a text.
LA.RI.1.3	Describe the connection between two individuals, events, ideas, or pieces of information in a text.
LA.RI.1.4	Ask and answer questions to help determine or clarify the meaning of words and phrases in a text.
LA.RI.1.5	Know and use various text features (e.g., headings, tables of contents, glossaries, electronic menus, icons) to locate key facts or information in a text.
LA.RI.1.6	Distinguish between information provided by pictures or other illustrations and information provided by the words in a text.
LA.RI.1.7	Use the illustrations and details in a text to describe its key ideas.

LA.RI.1.8	Identify the reasons an author gives to support points in a text and explain the application of this information with prompting as needed.
LA.RI.1.9	Identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures).
LA.RI.1.10	With prompting and support, read informational texts at grade level text complexity or above.
LA.W.1.5	With guidance and support from adults, focus on a topic, respond to questions and suggestions from peers and self-reflection, and add details to strengthen writing and ideas as needed.
LA.SL.1.1	Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups.
LA.L.1.1	Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

## **Differentiation**

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- Understand that gifted students, just like all students, come to school to learn and be challenged.
- Pre-assess your students. Find out their areas of strength as well as those areas you may need to address before students move on.
- Consider grouping gifted students together for at least part of the school day.
- Plan for differentiation. Consider pre-assessments, extension activities, and compacting the curriculum.
- Use phrases like "You've shown you don't need more practice" or "You need more practice" instead of words like "qualify" or "eligible" when referring to extension work.
- Encourage high-ability students to take on challenges. Because they're often used to getting good grades, gifted students may be risk averse.
- **Definitions of Differentiation Components:**
  - Content – the specific information that is to be taught in the lesson/unit/course of instruction.
  - Process – how the student will acquire the content information.
  - Product – how the student will demonstrate understanding of the content.
  - Learning Environment – the environment where learning is taking place including physical location and/or student grouping

### **Differentiation occurring in this unit:**

#### **Exit Ticket: Use Data to Inform Differentiation**

Every lesson closes with an Exit Ticket. Differentiation recommendations reside in the Teacher Edition to make the Exit Ticket data actionable.

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## **Modifications and Accommodations**

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Refer to QSAC EXCEL SMALL SPED ACCOMMODATIONS spreadsheet in this discipline.

## **Modifications and Accommodations used in this unit:**

### **Benchmark Assessments**

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**Benchmark Assessments** are given periodically (e.g., at the end of every quarter or as frequently as once per month) throughout a school year to establish baseline achievement data and measure progress toward a standard or set of academic standards and goals.

#### **Schoolwide Benchmark assessments:**

Aimsweb benchmarks 3X a year

Linkit Benchmarks 3X a year

DRA

#### **Additional Benchmarks used in this unit:**

Reveal Unit assessments

### **Formative Assessments**

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Assessment allows both instructor and student to monitor progress towards achieving learning objectives, and can be approached in a variety of ways. **Formative assessment** refers to tools that identify misconceptions, struggles, and learning gaps along the way and assess how to close those gaps. It includes effective tools for helping to shape learning, and can even bolster students' abilities to take ownership of their learning when they understand that the goal is to improve learning, not apply final marks (Trumbull and Lash, 2013). It can include students assessing themselves, peers, or even the instructor, through writing, quizzes, conversation, and more. In short, formative assessment occurs throughout a class or course, and seeks to improve student achievement of learning objectives through approaches that can support specific student needs (Theal and Franklin, 2010, p. 151).

#### **Formative Assessments used in this unit:**

Teacher observation

Checklists

Questioning and Discussion

Quizzes

## **Summative Assessments**

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**summative assessments** evaluate student learning, knowledge, proficiency, or success at the conclusion of an instructional period, like a unit, course, or program. Summative assessments are almost always formally graded and often heavily weighted (though they do not need to be). Summative assessment can be used to great effect in conjunction and alignment with formative assessment, and instructors can consider a variety of ways to combine these approaches.

### **Summative assessments for this unit:**

End of Unit assessments

## **Instructional Materials**

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See above

MATH.1.OA.A.2	Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.
MATH.1.OA.B.3	Apply properties of operations as strategies to add and subtract.
MATH.1.OA.C.5	Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).
MATH.1.OA.C.6	Add and subtract within 20, demonstrating accuracy and efficiency 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 $6 + 6 + 1 = 12 + 1 = 13$ ).
MATH.1.OA.D.7	Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false.
MATH.1.OA.D.8	Determine the unknown whole number in an addition or subtraction equation relating to three whole numbers.