

 **Instructional Targets**

Math Standards for Expressions and Equations

- **Building Blocks to Expressions and Equations:** Understand and use +, - and = symbols to solve addition and subtraction problems.
- **Reason About and Solve One-Variable Equations and Inequalities:** Order a sequence of steps to solve an equation.

Math Standards for the Number System

- **Building Blocks to The Number System:** Match symbolic representations ($\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, etc.) to fractional parts.
- **Compute fluently with multi-digit numbers and find common factors and multiples:** Add, subtract, multiply and divide multi-digit numbers with fluency.
- **Apply and Extend Previous Understanding of Operations with Fractions to Add, Subtract, Multiply and Divide Rational Numbers:** Add and subtract fractions with like denominators ($\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, & $\frac{1}{10}$) with sums less than or equal to one.

 **Differentiated Tasks**

Level 3 Students will...

- In the context of a real-world scenario, calculate addition and subtraction problems.
- In the context of a real-world scenario, use a combination of operations to solve an equation.
- Apply use of fractional representations of $\frac{1}{4}$, $\frac{1}{3}$, $\frac{1}{2}$, $\frac{1}{8}$ and $\frac{1}{10}$ in the context of real-world problems and scenarios.
- Use appropriate operations to solve real-world problems with multi-digit numbers.
- Use objects or a model to add or subtract two fractional units (e.g., $\frac{1}{4}$ cup + $\frac{1}{4}$ cup is the same as $\frac{1}{2}$ cup).

Level 2 Students will...

- In the context of a real-world scenario, model addition and subtraction of two sets of objects.
- In the context of a real-world scenario, use operations and models to solve an equation.
- Recognize appropriate use of $\frac{1}{2}$, $\frac{1}{3}$ and $\frac{1}{4}$ in the context of real-world problems and scenarios.
- Add, subtract, multiply and divide to solve real-world problems with multi-digit numbers.
- Model addition or subtraction of two fractional units.

Level 1 Students will...

- Count a set of objects in an addition or a subtraction problem through an active participation response (e.g. voice output device, eye gaze choice board).
- In the context of a real-world scenario, select numbers and count within an equation.
- Select fractional units as part of a real-world problem or scenario.
- Count a set of objects in an addition, subtraction, multiplication, or division real-world problem with multi-digit numbers through an active participation response (e.g., voice output device, eye gaze choice board).
- Match fractional parts of an object to model the solution to an addition or subtraction problem through an active participation response.



Topic Connection

In this unit, students are exploring how traits are inherited from parents. This includes how plants get DNA and traits from other plants. This is also the month we celebrate Mother's Day and flowers are often given as a gift to celebrate moms. The scenarios in this lesson have students working with items you would find in a flower garden.



Topic Words



Math Words

DNA
parent
plant
trait

add	count	more	solve
altogether	denominator	numerator	whole
answer	equal	part	
carry	fraction	plus	

* Power Words

Benchmark Assessments

- Math Problem Solving: Adding and Subtracting
- Basic Math: Numbers and Counting to 20
- Early Learning: Emerging Math
- Emerging Skills: Early Emerging Math Rubric

Monthly Checkpoint Assessments

- Level 3 - 2, Mathematics
- Level 1 Combined Counting, Reading and Mathematics, Questions 5 and 6



Lesson at a Glance

Activity 1

Activity 2



Instructional Activities

Addition

Adding Fractions with Like Denominators



See how these activities fit into the **Suggested Monthly Plan**.



ULS Materials and Resources

Addition Math Story Problems

Manipulatives (located in 19c) 

Standards Connection A

Standards Connection B

Clues Guides 1 and 2
Adding Fractions Math Story Problems

Manipulatives (located in 19c) 

Standards Connection A

Standards Connection B

Math Supports: Math Story Problems include interactive manipulatives. Use additional tools, such as those listed below, real objects or printable manipulatives to support student learning as needed.

Instructional Tools: [Number Journal](#)

Instructional Tools: [Math Pack / Numbers](#)

Instructional Tools: [Math Pack / Money](#)

Instructional Guides: [Mathematics](#)

L³ Skills: [Math Skills](#)



Additional Materials

 **Instructional Targets**

Math Standards for Expressions and Equations

- **Building Blocks to Expressions and Equations:** Understand and use +, - and = symbols to solve addition and subtraction problems.

Math Standards for the Number System

- **Compute fluently with multi-digit numbers and find common factors and multiples:** Add, subtract, multiply and divide multi-digit numbers with fluency.



Instructional Routine



Introduce	<ul style="list-style-type: none"> • Introduce the activity by asking a focus question about addition. For example, display a plus sign and ask, "When we see this sign what should we do—add or subtract?" Discuss students' responses. • Introduce and discuss the symbols used in an addition problem, including the plus sign and equal sign. • Tell students that their job will be to count and add numbers. Remind students that when they see a plus sign it means to add or put a group of items together. • Review the learning goal with students: Level 2-3: I will add to solve a math problem. Level 1: I will count objects.
Model	<ul style="list-style-type: none"> • Read and act out the Math Story Problems. Level 3: Model the steps of solving an addition problem. Model using Math Supports as needed. Then solve the math problem. Use Lesson 19 Standards Connection B to model calculator use as needed. • Level 2: Model the steps of solving the problem using manipulatives. Show students how to group the manipulatives to represent the numbers in the problem. Model using other Math Supports as needed. Then solve the problem by counting the total number of lesson objects. Use Lesson 19 Standards Connection B to model calculator use as needed. • Level 1: Model counting the lesson objects for the first number in the problem. Then model matching the correct numeral with the number of lesson objects counted. Repeat for each number in the problem and the answer to the problem. • To extend the lesson, model comparing numbers and counting objects in Math Story Problems using Lesson 19a Standards Connection A.
Provide Practice	<p>Provide students with appropriate real-world Math Stories, Manipulatives and Standards Connections as needed.</p> <ul style="list-style-type: none"> • Level 3: Have the students read, act out, write and solve the math problem. • Level 2: Read and act out a Math Story. Have the student illustrate/represent the Math Story using desired manipulatives. Have the student solve the math problem. • Level 1: Read and act out a Math story. Have the student participate in counting the number or numbers using manipulatives. Have the student use their active participation mode to select the number counted from a field of 2-3 choices or errorless choice.
Review	<ul style="list-style-type: none"> • Review selected Math Story Problems with students.



Check Understanding 

- ✳ **Level 3:** Can the student read, write and solve a math problem (using individual modifications)?
- ✳ **Level 2:** Can the student use objects/manipulatives to represent and solve a math problem?
- ✳ **Level 1:** Can the student participate in counting objects and choosing numbers?

 **Instructional Targets**

Math Standards for Expressions and Equations

- **Building Blocks to Expressions and Equations:** Understand and use +, - and = symbols to solve addition and subtraction problems.

Math Standards for the Number System

- **Building Blocks to The Number System:** Match symbolic representations ($\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, etc.) to fractional parts.
- **Apply and Extend Previous Understanding of Operations with Fractions to Add, Subtract, Multiply and Divide Rational Numbers:** Add and subtract fractions with like denominators ($\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, & $\frac{1}{10}$) with sums less than or equal to one.

 **Instructional Routine**



Introduce	<ul style="list-style-type: none"> • Introduce the activity by asking a focus question about fractions. For example, display a circle with one line cutting it in half and ask, "How many parts is this circle cut into?" Discuss students' responses. • Introduce and discuss the numerator and denominator and what each one represents. Refer to Clues Guide 1. • Refer to Clues Guide 2 to discuss adding fraction parts. For example, say, "If two fractions have the same denominator, they are parts of a whole that has been divided into the same number of parts. For example, $\frac{1}{4}$ is one of the pieces and $\frac{2}{4}$ is 2 of the same size pieces. We add these together to get $\frac{3}{4}$ or 3 of the same size pieces." • Tell students that their job will be to recognize, count and add fractions. Remind students that when they see a plus sign, they add the two numerators together and keep the denominator. • Review the learning goal with students: Level 2-3: I will add fractions to solve a math problem. Level 1: I will count fractional objects.
Model	<ul style="list-style-type: none"> • Read and act out the Math Story Problems. Level 3: Model the steps of solving a fraction addition problem with like denominators. Model using Math Supports as needed. Then solve the math problem. Use Lesson 19 Standards Connection B to model calculator use as needed. Level 2: Model the steps of solving the problem using manipulatives. Show students how to group the manipulatives to represent the numbers in the problem. Model using other Math Supports as needed. Then solve the problem by counting the total number of lesson objects. Use Lesson 19 Standards Connection B to model calculator use as needed. Level 1: Model counting the lesson objects for the first fraction in the problem. Then model matching the correct numeral with the number of lesson fractional objects counted. Repeat for each fraction in the problem and the answer to the problem. • Model real-life connections between fractions, decimals and percentages. For example, use the dimes in Math Pack / Money. Display and count out 10 dimes. Explain that since there are 10 total dimes in a dollar, one of the dimes is $\frac{1}{10}$ of a dollar. Further explain that a dime is written as \$.10, which means 10 cents or $\frac{1}{10}$. Once students are comfortable with this understanding, discuss the connection to percentage. Tell students that $\frac{1}{10}$ can be written as 10%, so one dime is $\frac{1}{10}$ of a dollar, and one dime is 10% of a dollar. Discuss real-life applications, like figuring out taxes or discounts when making purchases. Ask students to model and explain how two dimes would be written as a fraction, decimal and percentage of one dollar. Repeat this procedure using other coins and objects. • To extend the lesson, model counting objects and comparing fractions in Math Story Problems using Lesson 19a Standards Connection A.
Provide Practice	<p>Provide students with appropriate real-world Math Stories, Manipulatives and Standards Connections as needed.</p> <p>Level 3: Have the students read, act out, write and solve the math problem.</p> <p>Level 2: Read and act out a Math Story. Have the student illustrate/represent the Math Story using desired manipulatives. Have the student solve the math problem.</p> <p>Level 1: Read and act out a Math story. Have the student participate in counting the number or numbers using manipulatives. Have the student use their active participation mode to select the number counted from a field of 2-3 choices or errorless choice.</p>
Review	<ul style="list-style-type: none"> • Review selected Math Story Problems with students.



Check Understanding 

- ✳ **Level 3:** Can the student read, write and solve a math problem (using individual modifications)?
- ✳ **Level 2:** Can the student use objects/manipulatives to represent and solve a math problem?
- ✳ **Level 1:** Can the student participate in counting objects and choosing numbers?

 **Instructional Target**

Math Standards for the Number System

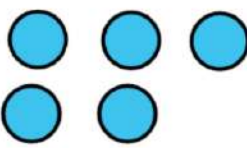

- **Building Blocks to the Number System:** Recognize and compare numbers showing the symbols $>$, $<$ or $=$.


 **Differentiated Tasks**

Level 3 Students will...	Level 2 Students will...	Level 1 Students will...
<ul style="list-style-type: none"> • Compare two numbers and use symbols to indicate $>$, $<$ or $=$. 	<ul style="list-style-type: none"> • Compare two groups of objects and determine that one group is larger than the other or that the groups are equal. 	<ul style="list-style-type: none"> • Count a set of objects to determine which group has more, less or an equal amount through an active participation response (e.g., voice output device, eye gaze choice board).

Comparing numbers is a skill with many applications in daily life. We compare a number of objects to determine whether we have enough for a required activity. We determine sets of objects that have more, less or equal amounts. However, this skill is often difficult for students. Using the scenario problems from the lesson, count groups of objects to compare numbers. Some students may use both the mathematical terminology and the symbols: greater than ($>$), less than ($<$) and equal to ($=$). Other students may use only the terminology of more, less and the same.

Lesson 19a - Math Story Problems
Standards Connection A
19a
Standards Connection A

5	$>$	2
		

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Unique Learning System®, March 2019

MIDDLE, Unit 8, Unit Target, Unit Topic
Lesson 19a, Math Story Problems - Addition, Tile

 **Instructional Targets**

Math Standards for Expressions and Equations

- **Building Blocks for Expressions and Equations:** Understand and use +, - and = symbols to solve addition and subtraction problems.

 **Differentiated Tasks**

Level 3	Level 2	Level 1
<p>Students will...</p> <ul style="list-style-type: none"> • Calculate addition and subtraction problems in the context of a real-world scenario. 	<p>Students will...</p> <ul style="list-style-type: none"> • Model addition and subtraction of two sets of objects in the context of a real-world scenario. 	<p>Students will...</p> <ul style="list-style-type: none"> • Count a set of objects in an addition or a subtraction problem through an active participation response (e.g., voice output device, eye gaze choice board).

Teaching How to Use a Calculator - Addition

Teaching How to Use a Calculator - Subtraction

<p>Step 1: Look at the addition problem.</p> $\begin{array}{r} 48 \\ + 27 \\ \hline \end{array}$	<div style="border: 1px solid black; padding: 5px; text-align: center;"> $48 + 27 = \underline{\quad}$ </div> <table border="1" style="width: 100%; text-align: center;"> <tr><td>C</td><td>√</td><td>÷</td><td>×</td></tr> <tr><td>7</td><td>8</td><td>9</td><td>-</td></tr> <tr><td>4</td><td>5</td><td>6</td><td>+</td></tr> <tr><td>1</td><td>2</td><td>3</td><td>%</td></tr> <tr><td>0</td><td>.</td><td>=</td><td></td></tr> </table>	C	√	÷	×	7	8	9	-	4	5	6	+	1	2	3	%	0	.	=	
C	√	÷	×																		
7	8	9	-																		
4	5	6	+																		
1	2	3	%																		
0	.	=																			
<p>Step 2: What is the top number?</p> 48	<p>Step 6: Push the numbers.</p> <p>Find the 2. Push the 2. The 2 will show up on the screen. Find the 7. Push the 7. The 7 will show up on the screen.</p> <div style="display: flex; justify-content: center; gap: 10px;"> <div style="border: 1px solid black; padding: 2px 5px;">2</div> <div style="border: 1px solid black; padding: 2px 5px;">7</div> </div> <p>Note: If you make a mistake, push clear.</p> <div style="text-align: center; margin-top: 5px;"> <div style="border: 1px solid black; padding: 2px 5px; display: inline-block;">C</div> </div>																				
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<p>Step 5: What is the bottom number?</p> 27	<p>Step 5: What is the bottom number?</p> 27																				

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<p>Step 4: What are you doing?</p> <p>Adding? + You are subtracting. Subtracting? - Push the minus sign. Multiplying? × Dividing? ÷</p> <div style="text-align: center; margin-top: 5px;"> <div style="border: 1px solid black; padding: 2px 5px; display: inline-block;">-</div> </div>	<p>Step 7: Solve the problem.</p> <p>Push the equal sign. The answer is 21. 21 is on the screen.</p> <div style="display: flex; justify-content: center; gap: 10px;"> <div style="border: 1px solid black; padding: 2px 5px;">=</div> <div style="border: 1px solid black; padding: 2px 5px; background-color: #d9ead3;">21</div> </div>																				
<p>Step 5: What is the bottom number?</p> 27	<p>Step 5: What is the bottom number?</p> 27																				



Mary Beth is counting items in the school flower garden.
She counts 4 shovels. She counts 2 pots.
How many items does Mary Beth count altogether?

Number of shovels Mary Beth counts:



4

Number of pots Mary Beth counts:



+

2



How many items does Mary Beth count altogether?



Ryan and Randy are planting flowers in the school flower garden.
Ryan plants 3 flowers. Randy plants 5 flowers.
How many flowers do they plant altogether?

Number of flowers Ryan plants:



3

Number of flowers Randy plants:



+

5



Number of flowers they plant altogether?

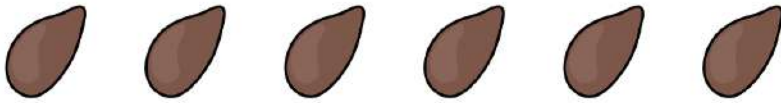


Danielle is counting items in the school flower garden.
She counts 1 bag of soil and 6 seeds.
How many items does Danielle count altogether?

Number of bags of soil Danielle counts:



Number of seeds Danielle counts:



1

Number of
bags of soil

+

6

Number of
seeds

=

Number of items
altogether?



Randy is sorting items for the school flower garden.
He sorts 6 flowers. He sorts 3 pots.
How many items does Randy sort altogether?

Number of flowers Randy sorts:



Number of pots Randy sorts:



6

Number of
flowers

+

3

Number of
pots

=

Number of items
altogether?



Ryan is collecting items for the school flower garden.
He collects 13 shovels and 3 bags of soil.
How many items does Ryan collect altogether?



Number of shovels Ryan collects:

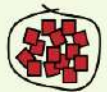
1	3
---	---



Number of bags of soil Ryan collects:

	3
--	---

+



How many items does Ryan collect altogether?

--	--



Mary Beth is counting items in the school flower garden.
She counts 8 flowers and 6 rocks.
How many items does Mary Beth count altogether?



Number of flowers Mary Beth counts:

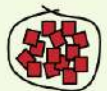
	8
--	---



Number of rocks Mary Beth counts:

	6
--	---

+



How many items does Mary Beth count altogether?

--	--



Brent and Danielle are planting seeds in the school flower garden. Brent plants 11 seeds. Danielle plants 4 seeds. How many seeds do they plant altogether?

11

Number of seeds
Brent plants



+

4

Number of seeds
Danielle plants



=

Number of seeds
they plant
altogether?



Mary Beth and Randy are filling pots with soil in the school flower garden. Mary Beth fills 12 pots. Randy fills 6 pots. How many pots do they fill altogether?

12

Number of pots
Mary Beth fills



+

6

Number of pots
Randy fills



=

Number of pots
they
fill altogether?



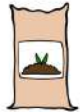


Mary Beth is collecting items for the school flower garden.
She collects 20 seeds, 1 bag of soil and 8 rocks.
How many items does Mary Beth collect altogether?



Number of seeds Mary Beth collects:

2	0
---	---



Number of bags of soil Mary Beth collects:

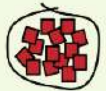
	1
--	---



Number of rocks Mary Beth collects:

+

	8
--	---



How many items does Mary Beth collect altogether?

--	--



Danielle is handing out items to students in the school flower garden.
She hands out 10 flowers, 12 pots and 2 shovels.
How many items does Danielle hand out altogether?



Number of flowers Danielle hands out:

1	0
---	---



Number of pots Danielle hands out:

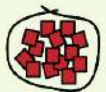
1	2
---	---



Number of shovels Danielle hands out:

+

	2
--	---



How many items does Danielle hand out altogether?

--	--



Randy is counting items in the school flower garden. He counts 33 seeds, 13 bags of soil and 3 rocks. How many items does Randy count altogether?

33

Number of seeds Randy counts



+

13

Number of bags of soil Randy counts



+

3

Number of rocks Randy counts



=

Number of items Randy counts altogether?



Ryan is putting away items from the school flower garden in the shed. He puts away 22 flowers, 14 pots and 1 shovel. How many items does Ryan put away altogether?

22

Number of flowers Ryan puts away



+

14

Number of pots Ryan puts away



+

1

Number of shovels Ryan puts away



=


Number of items Ryan puts away altogether?





Randy is sorting items into piles in the school flower garden.
He sorts 40 seeds and 38 rocks.
How many items does Randy sort altogether?

 40 seeds

 38 rocks



Number of seeds Randy sorts:

4	0
---	---



Number of rocks Randy sorts:

+	3	8
<hr/>		





How many items does Randy sort altogether?

--	--



Mrs. B's class is setting out items for the school flower garden.
They set out 30 bags of soil and 26 pots.
How many items do they set out altogether?

 30 bags of soil

 26 pots



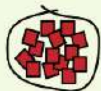
Number of bags of soil they set out:

3	0
---	---



Number of pots they set out:

+	2	6
<hr/>		



How many items do they set out altogether?

--	--



Randy is watering items in the school flower garden.
He waters 55 seeds and 22 flowers.
How many items does Randy water altogether?

 55 seeds

 22 flowers



Number of seeds
Randy waters



+



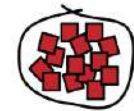
Number of flowers
Randy waters




=




Number of items
Randy waters
altogether?



Mrs. B's class is counting items for the school flower garden.
They count 45 pots and 40 shovels.
How many items does the class count altogether?

 45 pots

 40 shovels



Number of pots
Mrs. B's
class counts



+



Number of shovels
Mrs. B's
class counts



=



Number of items
Mrs. B's class
counts altogether?



Math Story 9
Adding 2-Digit Numbers - Carrying Guide



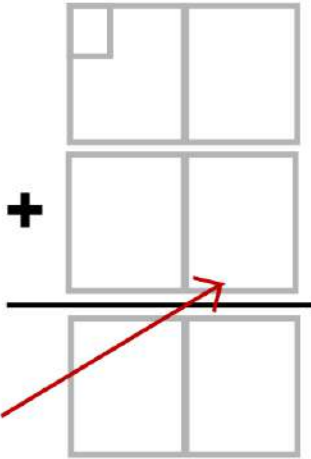
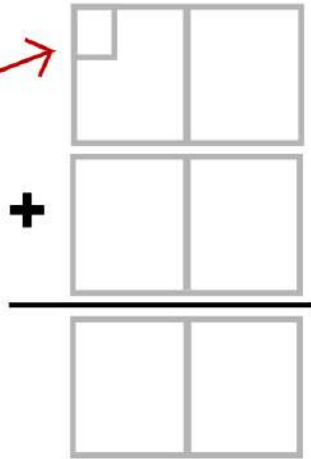

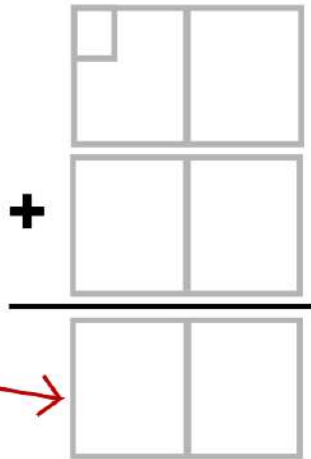
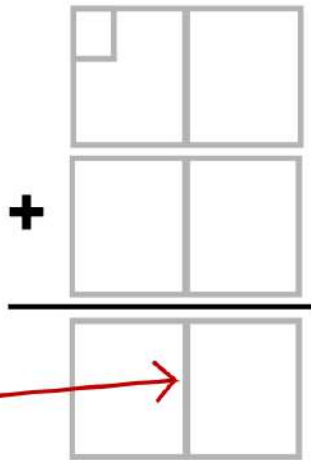
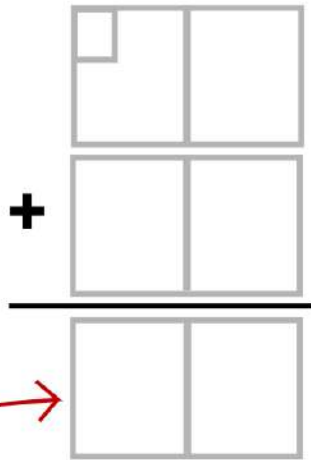
Cut down the middle and attach two columns together to create a vertical guide for students.

<p>Step 1: Set up your addition problem.</p> <div style="display: flex; align-items: center; margin-bottom: 10px;"> <p>Danielle has 26 photos.</p> </div> <div style="display: flex; align-items: center; margin-bottom: 10px;"> <p>Brent has 18 photos.</p> </div> <div style="display: flex; align-items: center; margin-bottom: 10px;"> + <table border="1" style="border-collapse: collapse; text-align: center;"> <tr><td style="width: 30px; height: 30px;">2</td><td style="width: 30px; height: 30px;">6</td></tr> <tr><td style="width: 30px; height: 30px;">1</td><td style="width: 30px; height: 30px;">8</td></tr> <tr><td style="width: 30px; height: 30px;"> </td><td style="width: 30px; height: 30px;"> </td></tr> </table> </div> <p>Add this side first. </p>	2	6	1	8			<p>Step 4: Carry the number.</p> <p>Write the number 1 in the box. </p> <div style="display: flex; align-items: center; margin-bottom: 10px;"> + <table border="1" style="border-collapse: collapse; text-align: center;"> <tr><td style="width: 30px; height: 30px;">2</td><td style="width: 30px; height: 30px;">6</td></tr> <tr><td style="width: 30px; height: 30px;">1</td><td style="width: 30px; height: 30px;">8</td></tr> <tr><td style="width: 30px; height: 30px;"> </td><td style="width: 30px; height: 30px;">4</td></tr> </table> </div>	2	6	1	8		4			
2	6															
1	8															
2	6															
1	8															
	4															
<p>Step 2: Add.</p> <div style="text-align: center; margin-bottom: 10px;"> <table style="margin: auto;"> <tr><td style="font-size: 2em;">6</td></tr> <tr><td style="font-size: 2em;">+ 8</td></tr> <tr><td style="border-top: 1px solid black; font-size: 2em;">14</td></tr> </table> </div>	6	+ 8	14	<p>Step 5: Add the other side.</p> <div style="display: flex; align-items: center; margin-bottom: 10px;"> <table style="margin-right: 20px;"> <tr><td style="font-size: 2em;">1</td></tr> <tr><td style="font-size: 2em;">2</td></tr> <tr><td style="border-top: 1px solid black; font-size: 2em;">+ 1</td></tr> <tr><td style="font-size: 2em;">4</td></tr> </table> + <table border="1" style="border-collapse: collapse; text-align: center;"> <tr><td style="width: 30px; height: 30px;">2</td><td style="width: 30px; height: 30px;">6</td></tr> <tr><td style="width: 30px; height: 30px;">1</td><td style="width: 30px; height: 30px;">8</td></tr> <tr><td style="width: 30px; height: 30px;">4</td><td style="width: 30px; height: 30px;">4</td></tr> </table> </div> <p>Write the 4 down. </p>	1	2	+ 1	4	2	6	1	8	4	4		
6																
+ 8																
14																
1																
2																
+ 1																
4																
2	6															
1	8															
4	4															
<p>Step 3: Write down the number.</p> <div style="display: flex; align-items: center; margin-bottom: 10px;"> <table style="margin-right: 20px;"> <tr><td style="font-size: 2em;">6</td></tr> <tr><td style="font-size: 2em;">+ 8</td></tr> <tr><td style="border-top: 1px solid black; font-size: 2em;">14</td></tr> </table> + <table border="1" style="border-collapse: collapse; text-align: center;"> <tr><td style="width: 30px; height: 30px;">2</td><td style="width: 30px; height: 30px;">6</td></tr> <tr><td style="width: 30px; height: 30px;">1</td><td style="width: 30px; height: 30px;">8</td></tr> <tr><td style="width: 30px; height: 30px;"> </td><td style="width: 30px; height: 30px;"> </td></tr> </table> </div> <p>Write the number 4 on this side. </p>	6	+ 8	14	2	6	1	8			<p>You have your answer!</p> <div style="display: flex; align-items: center; margin-bottom: 10px;"> + <table border="1" style="border-collapse: collapse; text-align: center;"> <tr><td style="width: 30px; height: 30px;">2</td><td style="width: 30px; height: 30px;">6</td></tr> <tr><td style="width: 30px; height: 30px;">1</td><td style="width: 30px; height: 30px;">8</td></tr> <tr><td style="width: 30px; height: 30px;">4</td><td style="width: 30px; height: 30px;">4</td></tr> </table> </div> <p>The answer is 44! </p>	2	6	1	8	4	4
6																
+ 8																
14																
2	6															
1	8															
2	6															
1	8															
4	4															

Math Story 9
Adding 2-Digit Numbers - Carrying Guide



Cut down the middle and attach two columns together to create a vertical guide for students.

<p>Step 1: Set up your addition problem.</p>  <p>Add this side first.</p>	<p>Step 4: Carry the number.</p> <p>Write the number in the box.</p> 
<p>Step 2: Add.</p> 	<p>Step 5: Add the other side.</p> <p>Write the number down.</p> 
<p>Step 3: Write down the number.</p>  <p>Write the number on this side.</p>	<p>You have your answer!</p>  <p>Here is the answer!</p>



Danielle is putting away items from the class flower garden in the shed. She puts away 19 bags of soil and 36 shovels. How many items does Danielle put away altogether?



19 bags of soil



36 shovels



Number of bags of soil Danielle puts away:

1	9
---	---



Number of shovels Danielle puts away:

+	3	6
---	---	---



How many items does Danielle put away altogether?

--	--



Ryan is planting items in the school flower garden. He plants 47 flowers and 24 seeds. How many items does Ryan plant altogether?



47 flowers



24 seeds



Number of flowers Ryan plants:

4	7
---	---



Number of seeds Ryan plants:

+	2	4
---	---	---



How many items does Ryan plant altogether?

--	--



Mary Beth is handing out items to students in the school flower garden. She hands out 25 shovels. She hands out 27 pots. How many items does Mary Beth hand out altogether?

 25 shovels

 27 pots



Number of shovels Mary Beth hands out:

2	5
---	---



Number of pots Mary Beth hands out:

+	2	7
---	---	---




How many items does Mary Beth hands out altogether?

--	--



Brent is collecting items for the school flower garden. He collects 49 seeds and 15 bags of soil. How many items does Brent collect altogether?

 49 seeds

 15 bags of soil



Number of seeds Brent collects:

4	9
---	---



Number of bags of soil Brent collects:

+	1	5
---	---	---




How many items does Brent collect altogether?

--	--



Danielle is putting away items from the school flower garden in the shed. She puts away 26 shovels and 35 pots. How many items does Danielle put away altogether?

 26 shovels

 35 pots



Number of shovels Danielle puts away:

2	6



Number of pots Danielle puts away:

3	5

+



How many items does Danielle put away altogether?

--	--



Mary Beth is watering items in the school flower garden. She waters 56 flowers. She waters 28 seeds. How many items does Mary Beth water altogether?

 56 flowers

 28 seeds



Number of flowers Mary Beth waters:

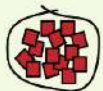
5	6



Number of seeds Mary Beth waters:

2	8

+





How many items does Mary Beth water altogether?

--	--



Cut down the middle and attach two columns together to create a vertical guide for students.

<p>Step 1: Set up your addition problem.</p> <p> Danielle has 265 photos.</p> <p> Brent has 187 photos.</p> $\begin{array}{r} 265 \\ + 187 \\ \hline \end{array}$ <p>Add this side first.</p>	<p>Step 4: Carry the number.</p> $\begin{array}{r} 1 \\ 6 \\ + 8 \\ \hline 15 \end{array}$ <p>Write the number 1 in the box. Write the number 5 in the middle.</p> $\begin{array}{r} 265 \\ + 187 \\ \hline 52 \end{array}$
<p>Step 2: Add.</p> $\begin{array}{r} 5 \\ + 7 \\ \hline 12 \end{array}$	<p>Step 5: Add the other side.</p> $\begin{array}{r} 1 \\ 2 \\ + 1 \\ \hline 4 \end{array}$ <p>Write the 4 down.</p> $\begin{array}{r} 265 \\ + 187 \\ \hline 452 \end{array}$
<p>Step 3: Write down the number.</p> $\begin{array}{r} 5 \\ + 7 \\ \hline 12 \end{array}$ <p>Write the number 1 in the box. Write the number 2 on this side.</p> $\begin{array}{r} 265 \\ + 187 \\ \hline 2 \end{array}$	<p>You have your answer!</p> $\begin{array}{r} 265 \\ + 187 \\ \hline 452 \end{array}$ <p>The answer is 452!</p>

Math Story 13
Adding 3-Digit Numbers - Guide



Cut down the middle and attach two columns together to create a vertical guide for students.

<p>Step 1: Set up your addition problem.</p>	
<p>+</p> <hr/> <p>Add this side first.</p>	<p>+</p> <hr/> <p>Write the number 1 in the box. Write the number in the middle.</p>
<p>+</p> <hr/>	<p>+</p> <hr/> <p>Write the number down.</p>
<p>+</p> <hr/> <p>Write the number 1 in the box. Write the number on this side.</p>	<p>+</p> <hr/> <p>This is the answer!</p>



Randy and Ryan are planting seeds in the school flower garden. Randy plants 122 seeds. Ryan plants 116 seeds. How many seeds do they plant altogether?



Randy plants
122 seeds



Ryan plants
116 seeds



Number of seeds Randy plants:

1	2	2
---	---	---



Number of seeds Ryan plants:

1	1	6
---	---	---



How many seeds do they plant altogether?

--	--	--



Danielle is handing out items to students in the school flower garden. She hands out 109 flowers and 56 shovels. How many items does Danielle hand out altogether?



109 flowers



56 shovels



Number of flowers Danielle hands out:

1	0	9
---	---	---



Number of shovels Danielle hands out:

	5	6
--	---	---



How many items does Danielle hand out altogether?

--	--	--



Mrs. B's class is planting items in the school flower garden. They plant 137 seeds and 90 flowers. How many items do they plant altogether?

 137 seeds

 90 flowers



Number of seeds the class plants:

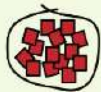
1	3	7
---	---	---



Number of flowers the class plants:

+

9	0
---	---





How many items do they plant altogether?

--	--	--



Brent is counting items for the school flower garden. He counts 250 bags of soil and 183 rocks. How many items does Brent count altogether?

 250 bags of soil

 183 rocks



Number of bags of soil Brent counts:

2	5	0
---	---	---



Number of rocks Brent counts:

+

1	8	3
---	---	---



How many items does Brent count altogether?

--	--	--



$\frac{3}{4}$ Fractions

A fraction is a part of a whole.

$\frac{\text{part}}{\text{whole}}$ $\frac{3}{4}$ $\frac{\text{numerator}}{\text{denominator}}$

Labels: **part** (above 3), **numerator** (above 3), **whole** (below 4), **denominator** (below 4). Arrows point from labels to the corresponding numbers in the fraction.

1 whole rectangle 

divided into 4 equal parts 

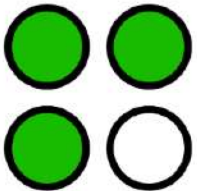


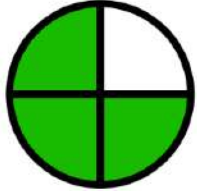
3 of the 4 equal parts shaded green 

$\frac{3}{4}$ are shaded green
(three-fourths) 

$\frac{3}{4}$ ← number of parts shaded green
 $\frac{4}{4}$ ← total number of parts in the whole



Other Ways to Represent a Fraction

<p>$\frac{3}{4}$ </p> <p>Part of a Set</p>	<p>$\frac{3}{4}$ </p> <p>Number Line</p>	<p>$\frac{3}{4}$ </p> <p>Fraction Bar</p>	<p>$\frac{3}{4}$ </p> <p>Fraction Circle</p>
--	--	--	--



Randy is looking at the seeds he planted. 3 out of the 10 seeds he planted have started to grow. Shade in the fraction of seeds that have started to grow. Write the fraction in the box.

What fraction of seeds have started to grow?





Randy is counting flowers blooming in the garden. 1 out of the 9 plants has flowers. Shade in the fraction of plants that have flowers. Write the fraction in the box.

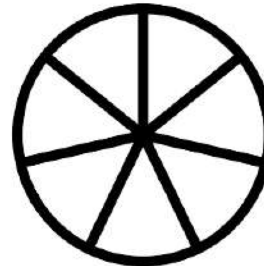
What fraction of plants have flowers?





Randy is using some of the bags of soil he bought. He uses 2 of the 7 bags he bought to plant seeds. Shade in the fraction of bags of soil he used to plant seeds. Write the fraction in the box.

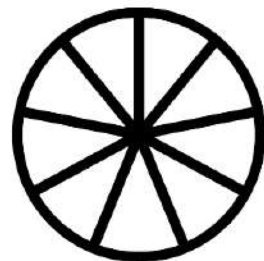
What fraction of bags of soil did Randy use?





Randy is checking to see if the shovels were put away. 7 out of the 9 shovels were put away. Shade in the fraction of shovels that were put away. Write the fraction in the box.

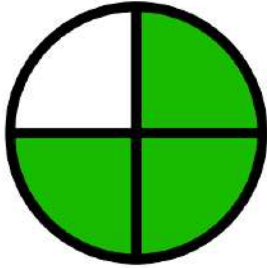
What fraction of shovels were put away?



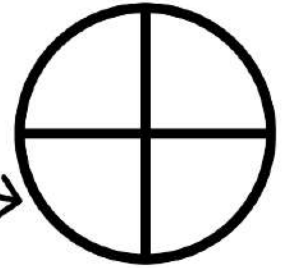


+

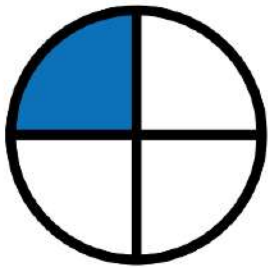
Adding Fractions



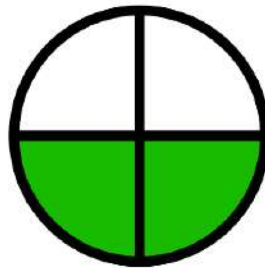
part → 3 ← numerator
whole → 4 ← denominator



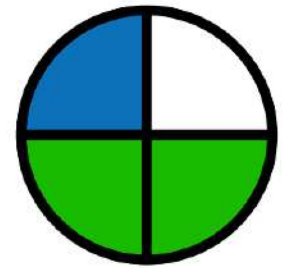
When the whole is divided into the same number, add the parts together.



+



=



$$\frac{1}{4}$$

+

$$\frac{2}{4}$$

=

$$\frac{3}{4}$$

When the denominators are the same, keep the denominator and add the numerators.



Danielle and Ryan have 5 flowers to plant in the garden.
Danielle plants 4 of the flowers. Ryan plants 1 of the flowers.
What fraction of the flowers do they plant altogether?

Shade in the fraction of flowers Danielle plants.		Shade in the fraction of flowers Ryan plants.		Shade in the fraction of flowers they plant altogether.
	+		=	
$\frac{\square}{\square}$	+	$\frac{\square}{\square}$	=	$\frac{\square}{\square}$
Danielle		Ryan		altogether



Randy and Mary Beth have 7 pots to fill with soil.
Randy fills 3 of the pots. Mary Beth fills 1 of the pots.
What fraction of the pots do they fill altogether?

Shade in the fraction of pots Randy fills.		Shade in the fraction of pots Mary Beth fills.		Shade in the fraction of pots they fill altogether.
	+		=	
$\frac{\square}{\square}$	+	$\frac{\square}{\square}$	=	$\frac{\square}{\square}$
Randy		Mary Beth		altogether

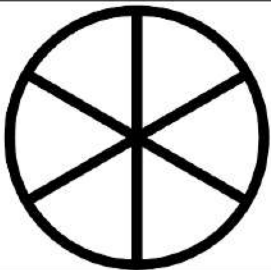


Danielle wants to check on all 6 seeds that she planted. She checks 3 seeds in the morning. She checks 2 seeds in the afternoon. What fraction of seeds does she check altogether?

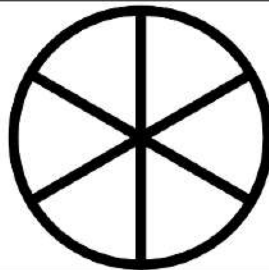
Shade in the fraction of seeds Danielle checks in the morning.

Shade in the fraction of seeds Danielle checks in the afternoon.

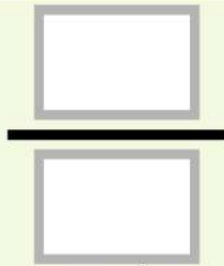
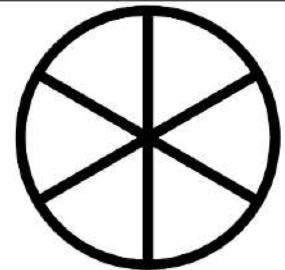
Shade in the fraction of seeds Danielle checks altogether.



+

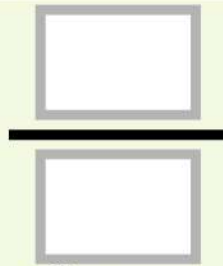


=



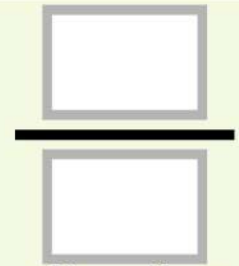
morning

+



afternoon

=



altogether



Randy wants to water all 3 flowers he planted. He waters 1 in the morning. He waters 1 in the afternoon. What fraction of the flowers does he water altogether?

Shade in the fraction of flowers Randy waters in the morning.

Shade in the fraction of flowers Randy waters in the afternoon.

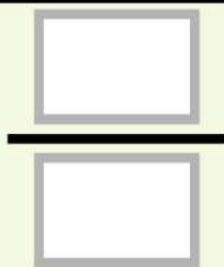
Shade in the fraction of flowers Randy waters altogether.



+

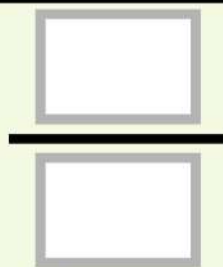


=



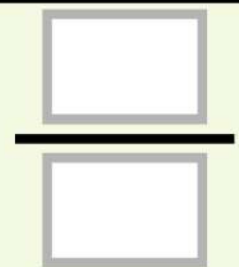
morning

+




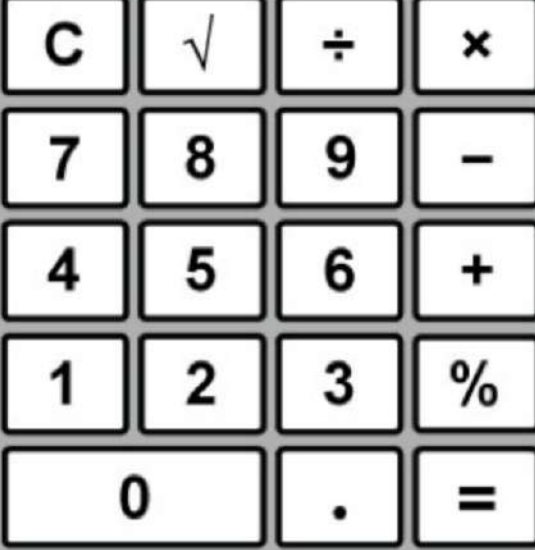
afternoon

=



altogether

<p>Step 1: Look at the addition problem.</p>	
$\begin{array}{r} 48 \\ + 27 \\ \hline \end{array}$	
<p>Step 2: What is the top number?</p>	
<p style="text-align: center;">48</p>	
<p>Step 3: Push the numbers.</p>	
<p>Find the 4. Push the 4. The 4 will show up on the screen. Find the 8. Push the 8. The 8 will show up on the screen.</p> <div style="text-align: center;"> 4 8 </div> <p>Note: If you make a mistake, push clear.</p> <div style="text-align: center;"> C </div>	
<p>Step 4: What are you doing?</p>	<p>Step 6: Push the numbers.</p>
<p>Adding? + You are adding. Subtracting? - Push the plus sign.</p> <div style="text-align: center;"> + </div> <p>Multiplying? x Dividing? ÷</p>	<p>Find the 2. Push the 2. The 2 will show up on the screen. Find the 7. Push the 7. The 7 will show up on the screen.</p> <div style="text-align: center;"> 2 7 </div> <p>Note: If you make a mistake, push clear.</p>
<p>Step 5: What is the bottom number?</p>	<p>Step 7: Solve the problem.</p>
<p style="text-align: center;">27</p>	<p>Push the equal sign. The answer is 75. 75 is on the screen.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 5px 15px;">=</div> <div style="border: 1px solid black; padding: 5px 15px; background-color: #d4edda;">75</div> </div>

<p>Step 1: Look at the subtraction problem.</p>	
$\begin{array}{r} 48 \\ - 27 \\ \hline \end{array}$	
<p>Step 2: What is the top number?</p>	<p>Step 6: Push the numbers.</p>
<p>48</p>	<p>Find the 2. Push the 2. The 2 will show up on the screen. Find the 7. Push the 7. The 7 will show up on the screen</p>
<p>Step 3: Push the numbers.</p>	<p>2 7</p> <p>Note: If you make a mistake, push clear.</p>
<p>Find the 4. Push the 4. The 4 will show up on the screen. Find the 8. Push the 8. The 8 will show up on the screen.</p> <p>4 8</p> <p>Note: If you make a mistake, push clear.</p> <p>C</p>	<p>Step 7: Solve the problem.</p>
<p>Step 4: What are you doing?</p> <p>Adding? + You are subtracting. Subtracting? - Push the minus sign. Multiplying? x Dividing? ÷</p> <p>-</p>	<p>Push the equal sign. The answer is 21. 21 is on the screen.</p> <p>= 21</p>
<p>Step 5: What is the bottom number?</p>	
<p>27</p>	