Name **Answer Key**

1

Joseph figured out this way of adding:

Use this method for these.

a. 32 + 19

b. 18 + 16

c. 26 + 12

14
+26
10
30
40

ANSWER: **a.** 51; **b.** 34; **c.** 38

COMMENTS & EXTENSIONS: Here, Joseph first gathers together his ones and then he gathers his tens. A variant of Joseph's method, taught in some countries, is to gather the tens first.

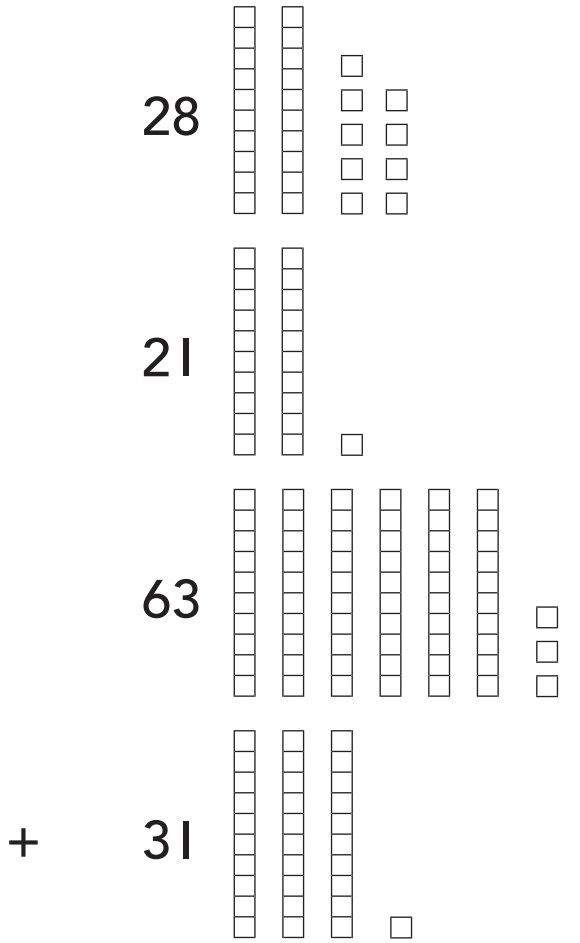
Explain how Joseph adds. Make the explanation clear enough that someone could follow your instructions to add numbers.

Name **Answer Key**

Try This

Emma read 28 pages on Monday, 21 pages on Tuesday, 63 pages on Wednesday, and 31 pages on Thursday.

How many pages did Emma read in all? Model the problem with Base Tens Blocks. Add to solve.



143 pages

Use Base Ten Blocks. Draw your model. Solve.

1. 12 + 70 + 47 = 129

Answers will vary.

continued on the next page

Name **Answer Key**

Use any strategy to add. Make a drawing to show how you solved.

2. 41 + 26 + 14 + 56 = 137

Answers will vary.

3. Tim added 35 + 42 + 10 by first adding together 30 + 40 + 10 and getting 80. What numbers should he add next to find the total? What is the total?

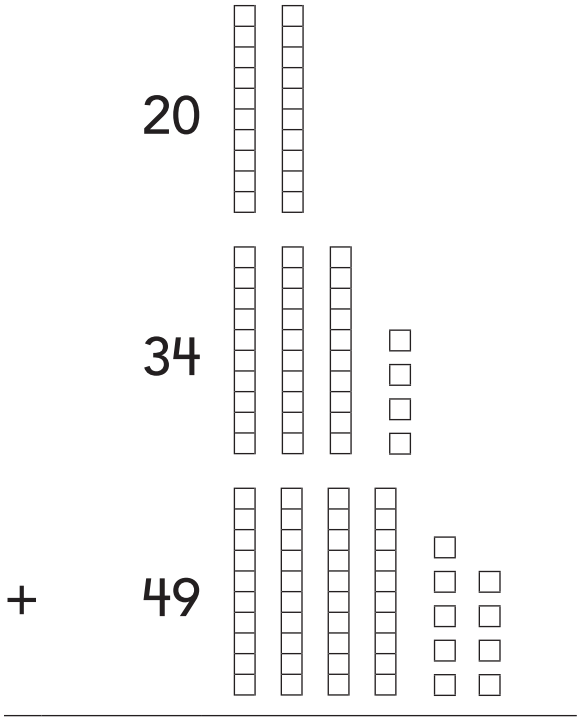
Show how you solved.

Answers will vary. Children might say they next added 5 + 2 + 0, got 7, and added 7 to 80, for a total of 87.

Name Answer Key

Use Base Ten blocks to build the model. Add.

1.



103

Use Base Ten Blocks to model the problem. Make a drawing of your model. Write the sum.

2. 50 + 40 + 45 = 135

Answers will vary.

continued on the next page

Name **Answer Key**

Use Base Ten Blocks to model the problem. Make a drawing of your model. Write the sum.

3. 31 + 30 + 54 + 23 = 138

Answers will vary.

Write the sum in the equation.

4. Jon sold 27 bags of popcorn at school, 40 bags at the firehouse, 20 bags at the store, and 34 bags in his building. How many bags of popcorn did he sell in all?

First add the tens, then add the ones.

27 + 40 + 20 + 34 = 121 bags

Name **Answer Key**

2

Use any method to solve.

a. $\begin{array}{r} 27 \\ +19 \\ \hline \end{array}$ **b.** $\begin{array}{r} 35 \\ +55 \\ \hline \end{array}$ **c.** $\begin{array}{r} 27 \\ +29 \\ \hline \end{array}$ **d.** $\begin{array}{r} 36 \\ +63 \\ \hline \end{array}$

ANSWER: **a.** 46; **b.** 90; **c.** 56; **d.** 99

COMMENTS & EXTENSIONS: Students will find the method that works best for them. Allow them to use any strategy, such as using manipulatives, drawing, using place value, or making compatible numbers.

Which method of addition do you like best? Explain why it is the best method.

Name Answer Key

Try This

19 + 85 + 21 = _____

What strategies can you use to add?

- Use place value:

  19 = 10 + 9

  85 = 80 + 5

  + 21 = 20 + 1

- Look for a known fact and group the numbers that way:

  9 + 1 + 5 = 10 + 5 = 15

  80 + 20 + 10 = 100 + 10 = 110

  15 + 110 = 110 + 15 = 125

- Complete the equation:

  19 + 85 + 21 = 125

Use Base Ten Blocks. Draw blocks to show how you add.

1.

		Hundreds	Tens	Ones
	35		|||	⁘
+	34			
	69			

Answers will vary. Drawings should accurately represent associative property and/or compatible groups.

continued on the next page

Name **Answer Key**

2.

	Hundreds	Tens	Ones
15			
41		||||	•
61			
+ 15			
132			

Answers will vary. Drawings should accurately represent associative property and/or compatible groups.

Add by using Base Ten Blocks. Make a drawing to show how you add.

3.

44
41
\+ 56
141

Answers will vary. Drawings should accurately represent associative property and/or compatible groups.

continued on the next page

Name Answer Key

Look for a known fact. Add. Write numbers to show the order you used to add.

4. 40 + 8 + 40 = 88

5. Kate wants to add 17 + 23 +20 + 55.

Draw a picture or write the numbers to how she could have added.

Which two numbers could she add first?

_____ + _____ = _____ Answers will vary.

Which two numbers could she add next?

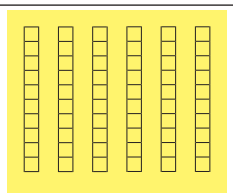
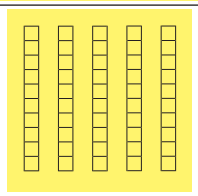
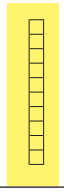
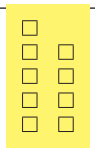
_____ + _____ = _____ Answers will vary.

17 + 23 +20 + 55 = 115

Name **Answer Key**

Use Base Ten Blocks to build the model. Use the blocks to add. Write the sum.

1.

	Hundreds	Tens	Ones
62			
54			
13			
+ 9			

138

Use Base Ten Blocks. Draw your model to show how you added. Write the sum.

2. Look for numbers that are easy to add, and add those first.

50
35
\+ 25

110

Answers will vary.

continued on the next page

Name Answer Key

Write the sum in the equation.

3. Help Griffin finish adding this problem. Look for facts you know. Find ways to group the numbers to make it easy to add.

57 + 43 + 40 =

50 + 7 + 40 + 3 + 40 =

50 + 40 + 40 + 7 + 3 =

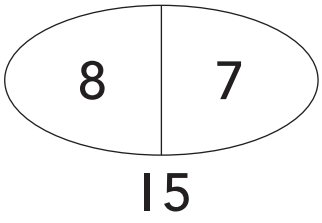
_____ + _____ + _____ = Answers will vary. One possible answer: 50 + 40 + 50.

_____ + _____ = 140 Answers will vary. One possible answer: 100 + 40.

Name **Answer Key**

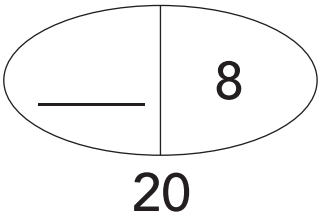
3

This loop picture shows that 8 + 7 = 15.

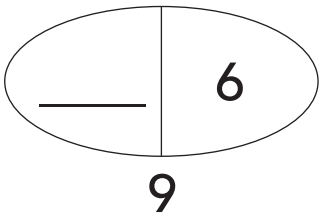


What numbers are missing from the pictures below?

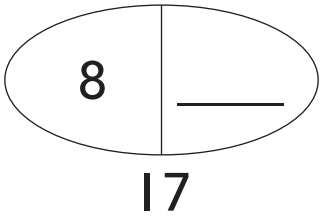
a.



b.



c.



ANSWER: **a.** 12; **b.** 3; **c.** 9

COMMENTS & EXTENSIONS: Once students understand how these activities work, try to give them more difficult ones.

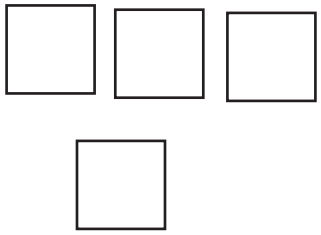
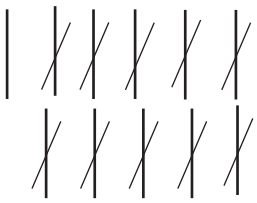
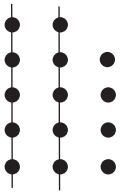
Name **Answer Key**

Try This

289 Use Base Ten Blocks to show the numbers.

\+ 125 Compose tens and hundreds.

414 Make a drawing to show how you add.

Hundreds	Tens	Ones
		

Use Base Ten Blocks. Draw your model. Write the sum.

1. Ms. Greco's class planted 77 seeds. Mr. Ryan's class planted 116 seeds. How many seeds did the classes plant in all?

77

\+ 116

193 seeds

continued on the next page

Name **Answer Key**

Make a drawing to show how you add. Complete the equation.

2. 400 + 431 = 831

Answers will vary.

Write the numbers to show how you add tens and compose a hundred. Write the sum.

3.

$$\begin{array}{r} 561 \\ +\ 368 \\ \hline 929 \end{array}$$

Answers will vary.

4. Sam showed how he added. If you agree with his sum, draw the blocks he used to model the addition. If you do not agree, add again, and write the sum.

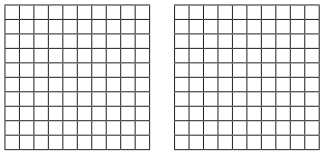
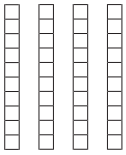
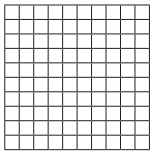
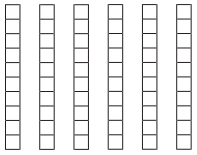
$$\begin{array}{r} 750 \\ +\ 150 \\ \hline 800 \\ +\ 100 \\ \hline 900 \end{array}$$

Check children's drawings.

Name **Answer Key**

Use Base Ten Blocks to build the model. Use the blocks to add. Write the sum.

1. Hint: Do you need to make a hundred?

	Hundreds	Tens	Ones
240			
+ 163			
403		Answers will vary.	

2. Hint: Do you need to make a ten?

	Hundreds	Tens	Ones
408			
+ 324		Answers will vary.	
732			

continued on the next page

Name **Answer Key**

Add. Use numbers to show how you add hundreds, tens, and ones. Write the sum.

3.

$$\begin{array}{r} 323 \\ +\ 145 \\ \hline \boxed{468} \end{array}$$

Answers will vary.

4. Collin added and composed a ten. Show how he can finish adding.

$$\begin{array}{r} 535 \\ +\ 225 \\ \hline \boxed{760} \end{array}$$

Name **Answer Key**

4

Susan has a homemade method for subtraction.

Try Susan's method to solve these.

a. 24 − 9

b. 30 − 7

c. 16 − 9

d. 25 − 17

24
− 7
3 (gets me to 10)
10 (gets me to 20)
4 (gets me to 24)
17

ANSWER:

a. 24 − 9 = 1; 14 + 1 = 15

b. 30 − 7 = 3; 20 + 3 = 23

c. 16 − 9 = 1; 6 + 1 = 7

d. 25 − 17 = 3; 5 + 3 = 8

COMMENTS & EXTENSIONS: Students may have trouble seeing that adding 3 to 7 is what gets Susan to 10. You may want to guide them through this first step and allow them to puzzle out the next steps (adding 10 to get to 20 and a final 4 to reach 24). While this is not the traditional method for subtraction, can you think of times when this would be useful?

Use this "count-up" method to figure out how old George Washington would be if he were alive today. He was born in 1732.

Name Answer Key

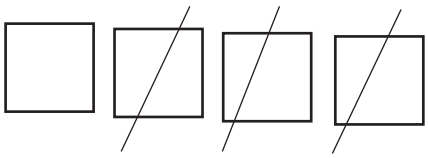
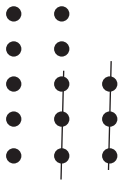
Try This

463
– 326
137

Use Base Ten Blocks to show the numbers.

Decompose if you need to make more tens or ones.

Make a drawing to show how you subtract with blocks.

Hundreds	Tens	Ones
		

1. Use Base Ten Blocks to show the numbers. Make a drawing to show how you subtract. Write the difference.

Check children's drawings.

	Hundreds	Tens	Ones
648			
– 264			
384			

continued on the next page

Name Answer Key

Make a drawing to show how you subtract. Complete the equation.

2. Ms. Carter's class collected 176 blankets. They donated 132 blankets to day care centers. Now how many books do they have?

176 – 132 = 44 blankets

Answers will vary.

Write numbers or draw to show how you subtract. Write the sum.

3.
$$\begin{array}{r} 361 \\ -\ 119 \\ \hline \boxed{242} \end{array}$$

Answers will vary.

4. Solve 859 – 446 by first finding the unknown addend. Then solve.

446 + 413 = 859

859 – 446 = 413

Name **Answer Key**

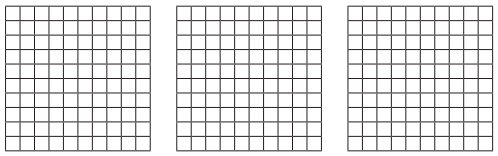
Use Base Ten Blocks to build the model. Use the blocks to subtract. Write the difference.

1.

307

– 282

25

Hundreds	Tens	Ones
 Answers will vary.		

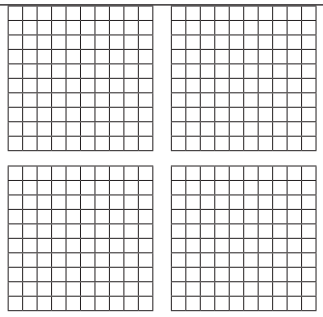
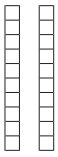
Use Base Ten Blocks to build the model. Make a drawing to show how you subtract. Write the difference.

2.

423

– 214

209

Hundreds	Tens	Ones
 Answers will vary.		

continued on the next page

Name Answer Key

Subtract. Write the difference.

3.

$$\begin{array}{r} 792 \\ -\ 459 \\ \hline \boxed{333} \end{array}$$

4. Cole brought 250 bottles to recycling. Only 150 bottles would fit in the bin. How many bottles did he have to bring back home? Write the difference.

250 – 150 = 100 bottles

Show the related addition:

150 + 100 = 250

Name **Answer Key**

5

a. Alexis knows that 4 plus 4 is 8. How can she figure out 4 plus 5?

b. Jose knows that 4 plus 5 is 9. How can he figure out 14 plus 15?

ANSWER: **a.** Sample: 5 is 1 more than 4, so 4 plus 5 is one more than 4 plus 4, so 4 plus 5 is 9; **b.** Sample: 14 and 15 are each 10 more than 4 and 5, so 14 plus 15 is 20 more than 4 plus 5, so 14 plus 15 is 29.

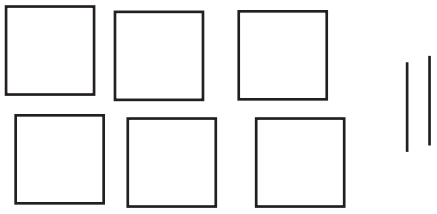
COMMENTS & EXTENSIONS: In mathematics, information is almost always related to other information and can often be derived from other information.

Name **Answer Key**

Try This

Make a drawing to show how to find the sum with Base Ten Blocks. Write the sum.

$$\begin{array}{r} 520 \\ +\ 100 \\ \hline 620 \end{array}$$



Make a drawing to show how you would subtract without blocks. Write the difference.

1. Ken used Base Ten Blocks to subtract 214 – 100.

Answers will vary. One possible drawing: 2 flats, 1 ten, 4 ones; 1 flat crossed off.

214 – 100 = 114

Make a drawing to show how you subtract. Complete the equation.

2. Find 301 – 10.

Answers will vary. One possible drawing: 3 flats, 1 unit; 1 flat decomposed to show 10 rods, 1 rod crossed off.

301 – 10 = 291

continued on the next page

Name Answer Key

3. Use mental math to add or subtract. Complete the equations.

170 – 10 = 160

386 + 10 = 396

827 – 10 = 817

754 + 100 = 854

490 + 10 = 500

135 – 100 = 35

4. Emily moves her marker to number 199 on the game board. Then she scores 10 more points. What number will she move to next?

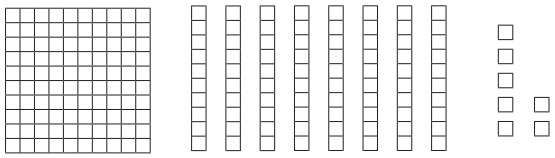
Complete the addition equation.

199 + 10 = 209

Name **Answer Key**

Use Base Ten Blocks to build the model. Write the difference.

1. 187

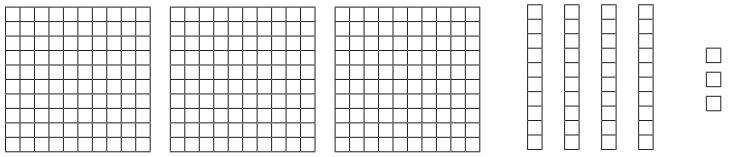


– 10

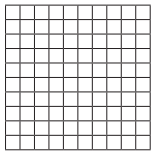
177

Make a drawing to show how you add with Base Ten Blocks. Write the sum.

2. 343



+ 100



Answers will vary.

443

continued on the next page

Name Answer Key

Write the difference in the equation.

3. Lenny used Base Ten Blocks to subtract 500 – 100. Draw a picture to show how he subtracted, or solve using mental math.

500 – 100 = 400

Answers will vary.

Use mental math to add. Write the sums.

4.

451	451	190	190
+ 10	+ 100	+ 10	+ 100
461	551	200	290

Use mental math to subtract. Write the differences.

5.

210	210	808	651
– 100	– 10	– 100	– 10
110	200	708	641