

#### **Objective**

Add and subtract within 1,000.

#### Common Core State Standards

2.NBT.7 Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/ or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.

### Number and Operations in Base Ten

# Adding and Subtracting Within 1,000

Adding and subtracting multi-digit numbers is an important skill in everyday life. Addition and subtraction require children to represent numbers and understand their values. Children will use their prior knowledge in place value, comparing three-digit numbers, and properties of operations to add and subtract numbers within 1,000, with and without regrouping.

Try It! Perform the Try It! activity on the next page.

#### **Talk About It**

Discuss the Try It! activity.

- Write 253 and 324 on the board. Ask: What is the best way to write these numbers as an addition problem? Help children set up the addition vertically and realize they must align the place-value columns.
- Say: Remember that when you add, you sometimes need to regroup. Ask: How do you know when you need to regroup? Are there any numbers you need to regroup in this problem? How do you show regrouping using your blocks? Add the numbers together as a class.
- Say: You may need to regroup when you are subtracting, too. Ask: Do you need to regroup any numbers when you are subtracting in this problem? What do you need to do with your blocks when you regroup to subtract? How is regrouping different for adding than it is for subtracting?

#### Solve It

With children, reread the problem. Have children draw blocks and write two number sentences to find the total number of problems that Dawn and Lina solved and how many problems David and Zac solved.

#### **More Ideas**

For another way to teach adding and subtracting within 1,000-

Have pairs pick 6 numbers out of a bag to make 2 three-digit numbers. Have one child add them and the other child subtract the smaller number from the larger number.

#### **Formative Assessment**

Have children try the following problem.

245 <u>+ 127</u> **A.** 122 **B.** 362 **C.** 372

#### Try It! 30 minutes | Groups of 3

Here is a problem about adding and subtracting within 1,000.

Dawn, Lina, David, and Zac are keeping track of the number of math problems they solve. So far, Dawn has solved 253 problems and Lina has solved 354 problems. David and Zac have solved 89 fewer problems than Dawn and Lina. How many problems have David and Zac solved?

Introduce the problem. Then have children do the activity to solve the problem. Distribute Base Ten Blocks, charts, and pencils to children.



**1. Say:** First we will add together 253 and 354. Show 253 with blocks. Draw the blocks you used on the chart and draw a plus sign below them. Have children set the blocks they used to the side.



- Base Ten Blocks (10 flats, 20 rods, and 20 units per group)
- Triple Place-Value Chart (BLM 8; 2 per child)
- pencils (1 per child)



**2. Say:** Now we will use new blocks to show 354. Have children build the number and then draw the blocks they used in the second row on the chart.



**3. Say:** Next put the groups of blocks together to find the sum. **Ask:** Do you need to regroup? Do you have 10 units to exchange for a rod? Do you have 10 rods to exchange for a flat? **Say:** Now draw the new blocks you have all together on the chart.



**4. Say:** Take the sum from the first two numbers and draw it on the second chart. Now you need to subtract 89. Place a minus sign under the first row. Draw the blocks you have to subtract in the second row. Guide children in exchanging blocks to regroup and subtract.



Use Base Ten Blocks. Build each number and draw the blocks. Find the sum or difference.

3.	489	4.	638
+	246		<u>    157                                </u>

52

		735		-	481			
Find each sum or difference.								
5.	335 -	- 254 = _	81	6.	316 + 2	278 = _	594	
Hands-On S	tandards Commo	n Core Edition		ont nades at han	d?mind.com/hosstuden	t		

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### **Answer Key**

**Challenge!** Leah built the number 568 with Base Ten Blocks. She gave some of these blocks to her friend. Then she had 350 blocks left. How many blocks did she give away? Use drawings or numbers to show your answer.

Challenge: 218; drawing should show 568 in blocks with 350 crossed out; number sentence 568 – 350 = 218.



Name \_

## Use Base Ten Blocks. Build the numbers. Find the sum or difference.



Sum:

Difference: \_\_\_\_\_

Use Base Ten Blocks. Build each number and draw the blocks. Find the sum or difference.

3.	489	4.	(	638
+	246			<u>157</u>

Find each sum or difference.

**5.** 335 – 254 = \_\_\_\_\_

**6.** 316 + 278 =

**Challenge!** Leah built the number 568 with Base Ten Blocks. She gave some of these blocks to her friend. Then she had 350 blocks left. How many blocks did she give away? Use drawings or numbers to show your answer.



**Triple Place-Value Chart** 

BLM

8