

# LESSON 2

## Operations and Algebraic Thinking

# Subtraction Sentences

Subtracting numbers requires that children be able to find the difference between two values. Real-life situations will show them that this is a skill they use on a daily basis. In order to write a number sentence, children must use a subtraction sign ( $-$ ) and an equal sign ( $=$ ).

### Objective

Write and solve subtraction sentences.

### Common Core State Standards

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

### Try It!

Perform the Try It! activity on the next page.

### Talk About It

Discuss the Try It! activity.

- **Ask:** How many Two-Color Counters did you have when you began? How many were taken away? How can you find how many were left?
- **Ask:** What part of a subtraction sentence shows how many are left after some are taken away?
- Encourage children to describe everyday situations in which they might use subtraction sentences. For example, **ask:** How many of 20 grapes were left for you after your brother ate 10? Take some of the examples children give and write subtraction problems for them on the board.

### Solve It

With children, reread the problem. Have children draw a picture showing the number of balloons that Ben put in his picture.

### More Ideas

For other ways to teach about writing and solving subtraction sentences—

- Use Cuisenaire® Rods to show the difference in a “take away” model. Have children use two rods of different lengths. Have them explain the difference in length, and then find a third rod to combine with the shorter rod to equal the longer one. Make sure children understand that the third rod shows the difference between the other two.
- Have children use a number line and Two-Color Counters to model subtraction; for example, **say:** Chris walked 7 steps forward. Then he took 2 steps back. **Ask:** How many steps forward is he? Have children write a number sentence that shows this problem on the number line.

### Formative Assessment

Have children try the following problem.

Billy has 5 apples. He gives 2 apples away. How many does he have left? Circle the number sentence that shows the answer for this problem.

- A.  $5 - 2 = 7$
- B.  $5 - 2 = 3$
- C.  $3 - 2 = 5$

**Try It!**

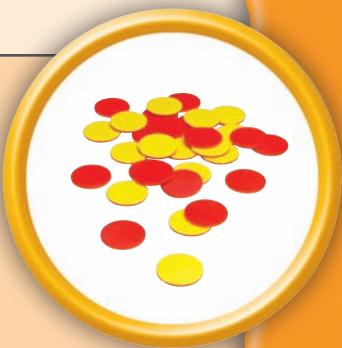
30 minutes | Pairs

Here is a problem about writing and solving subtraction sentences.

*In Mrs. Hinkley's class, children are pasting paper circles on pictures to show bunches of balloons. Ben wants to show 10 balloons. After creating 10 paper circles, Ben goes to get some water. Ben's friend Leon takes some of Ben's circles. How can Ben figure out how many circles Leon took?*

Introduce the problem. Then have children do the activity to solve the problem.

Give each pair Two-Color Counters, paper, and a crayon. **Say:** Let's pretend that each counter is a paper circle like the ones Ben was using.

**Materials**

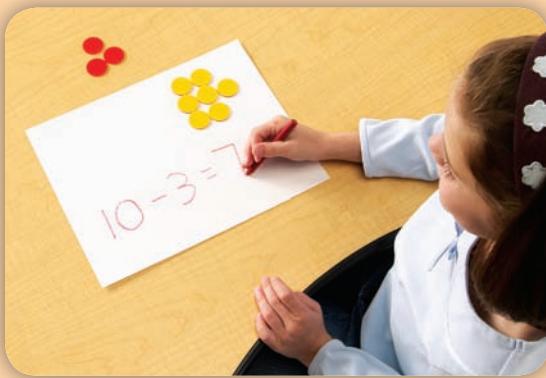
- Two-Color Counters (10 per pair)
- paper (1 sheet per pair)
- crayons (1 per pair)



**1.** Ask one partner to assemble the counters in a group. **Say:** Put the yellow counters in a group on the paper, count them, and write the number of counters below the group.



**2.** Ask the other partner to flip 3 counters in the group of 10 over to red. Then place the 3 red counters to the right of the group. **Say:** Write the number 3 below the group of counters we're taking away. Then write the minus sign before the 3 to show you are taking them away in your number sentence.



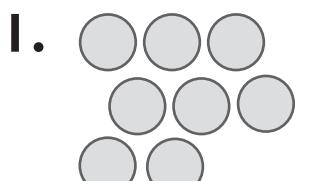
**3. Ask:** How many counters are left after 3 are taken away from the 10? **Say:** Count to find the number. Then complete the subtraction sentence on your paper to show the answer. Remember to write an equal sign before the number that is left over.

**⚠ Look Out!**

Some children might want to add instead of subtract. Others might confuse the  $-$ ,  $+$ , and  $=$  symbols. Make sure they understand the meanings of these symbols and how they are used. Also watch for children placing the "take away" or smaller number first in the sentence.

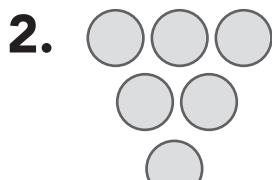
## Use Two-Color Counters. Build each subtraction problem. Write the number sentence.

(Check students' work.)



$11 - 3$

$\underline{11} - \underline{3} = \underline{8}$



$8 - 2$

$\underline{8} - \underline{2} = \underline{6}$

## Use Two-Color Counters. Build the subtraction shown. Draw the model. Complete the number sentence.

3.  $9 - 5 = \underline{\quad 4 \quad}$

4.  $8 - 7 = \underline{\quad 1 \quad}$

5.  $5 - 3 = \underline{\quad 2 \quad}$



## Answer Key

**Challenge!** Complete the subtraction sentence. Then write an addition sentence to check your answer.

$12 - 5 = \underline{\hspace{2cm}}$

Challenge: 7;  $7 + 5 = 12$

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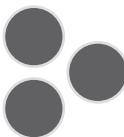
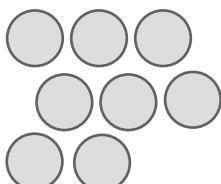
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**Use Two-Color Counters. Build each subtraction problem. Write the number sentence.**

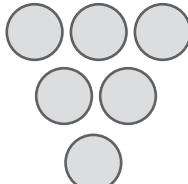
1.



$$\underline{\quad} - \underline{\quad} = \underline{\quad}$$

$$11 - 3$$

2.



$$\underline{\quad} - \underline{\quad} = \underline{\quad}$$

$$8 - 2$$

**Use Two-Color Counters. Build the subtraction shown. Draw the model. Complete the number sentence.**

3.  $9 - 5 = \underline{\quad}$

4.  $8 - 7 = \underline{\quad}$

5.  $5 - 3 = \underline{\quad}$

Name \_\_\_\_\_

**Challenge!** Complete the subtraction sentence. Then write an addition sentence to check your answer.

$12 - 5 = \underline{\hspace{2cm}}$

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