

Objective

Write and solve addition 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.

Operations and Algebraic Thinking

Addition Sentences

Adding numbers is essentially joining a part to a part to make a whole. In order to write a number sentence with addition, children will have to be fluent with the plus sign (+) and the equal sign (=). Children should understand that they are writing sentences in which the left side of the equal sign is equal to the right side of the equal sign.

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

Talk About It

Discuss the Try It! activity.

- **Ask:** How many children had apples for dessert? How many had oranges? Which Cuisenaire® Rods did you use to show the apples and oranges?
- **Ask:** How many children had fruit? How do you know?
- **Ask:** What rods could we use to add together 3 and 4? What number sentence would we write?
- Discuss with children other situations in which they might want to add two numbers together. Ask them how they would write number sentences in these situations using a plus sign and an equal sign.

Solve It

With children, reread the problem. Ask children to draw a picture to show that two oranges plus three apples equals five pieces of fruit. Then have them write the number sentence $2 + 3 = 5$ below their drawing.

More Ideas

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

- Give children Two-Color Counters and have them follow verbal instructions for solving addition sentences. For example, **say:** Use red counters to show glasses of grape juice, and use yellow counters to show apple juice. Add 4 glasses of grape juice and 5 glasses of apple juice to find how many glasses of juice children drank in all. Then have children write a number sentence to match the model.
- Have children use Snap Cubes® to show joining problems. For example, **say:** Five birds were sitting on a tree branch. Two more birds landed on the branch. **Ask:** How many were there in all? Then have children write the addition sentence for the problem.

Formative Assessment

Have children try the following problem.

A fish tank has four fish. A child brings in two more fish for the tank. Circle the addition sentence that shows how many fish in all are in the tank.

- A. $4 + 4 = 8$ B. $4 + 2 = 6$ C. $2 + 2 = 4$

Try It! 30 minutes | Pairs

Here is a problem about writing and solving addition sentences.

At lunch today, two children had oranges for dessert and three children had apples. How many children in all had fruit?

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

Give each pair Cuisenaire® Rods, crayons, and paper.

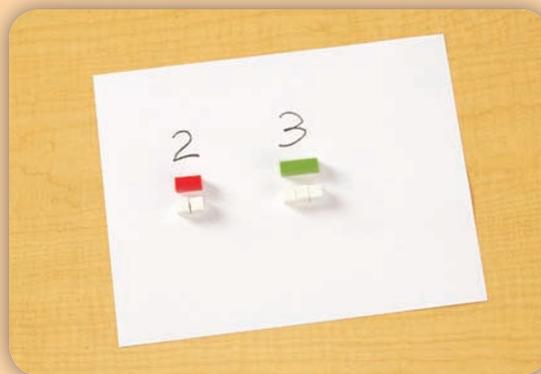
Say: *The white rod is one unit. It stands for one piece of fruit.*

Materials

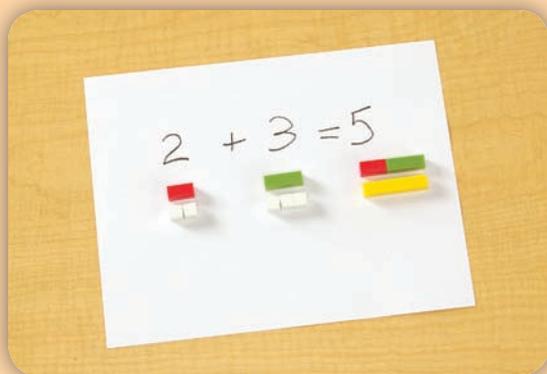
- Cuisenaire® Rods (5 white, 1 red, 1 light green, and 1 yellow per pair)
- crayons (an assortment per pair)
- paper (1 sheet per pair)



1. Say: *Compare the white rods with the other rods. Find the rod that is equal to 2 units. Put it on your paper above the two white rods. Write "2" above the rods.*



2. Ask children to find the rod that is equal to 3 units. **Say:** *Put the rod on your paper next to the red rod. Write "3" above the 3-unit rod.*



3. Say: *Make a train with a red rod and a green rod to show the sum. Then use the numbers you wrote to make an addition sentence. Write a plus sign and an equal sign to write an addition sentence for 2 plus 3. Then match the train with another rod. Use the rods to show the addition sentence.*

! Look Out!

Check that children have placed the addition sign and equal sign in the correct place. Emphasize that the addition sign goes between the numbers being joined and that the equal sign is placed after the numbers have joined. The sum comes after the numbers have joined, so it follows the equal sign.

Use Cuisenaire Rods. Build the addition sentence.
Write the number sentence.

(Check students' work.)

1. **yellow** + **purple**
 $\underline{\quad 5 \quad} + \underline{\quad 4 \quad} = \underline{\quad 9 \quad}$

2. **dark green** + **red**
 $\underline{\quad 6 \quad} + \underline{\quad 2 \quad} = \underline{\quad 8 \quad}$

Use Cuisenaire Rods. Build the addition sentence.
Draw the model. Write the number sentence.

3. $3 + 4$

$$3 + 4 = \underline{\quad 7 \quad}$$

Find each sum.

4. $3 + 8 = \underline{\quad 11 \quad}$

5. $4 + 4 = \underline{\quad 8 \quad}$

6. $1 + 5 = \underline{\quad 6 \quad}$

7. $7 + 2 = \underline{\quad 9 \quad}$



Answer Key

Challenge! What does the symbol $+$ mean?
What does the symbol $=$ mean?

Challenge: (Sample) add; equals

**Use Cuisenaire Rods. Build the addition sentence.
Write the number sentence.**

1. **yellow** + **purple**
 _____ + _____ = _____

2. **dark green** + **red**
 _____ + _____ = _____

**Use Cuisenaire Rods. Build the addition sentence.
Draw the model. Write the number sentence.**

3. $3 + 4$

$3 + 4 =$ _____

Find each sum.

4. $3 + 8 =$ _____

5. $4 + 4 =$ _____

6. $1 + 5 =$ _____

7. $7 + 2 =$ _____

Name _____

Challenge! What does the symbol $+$ mean?
What does the symbol $=$ mean?
