

Objective

Find sums to 10.

Common Core State Standards

- K.OA.1 Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.
- K.OA.2 Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.

Operations and Algebraic Thinking

Addition: Sums to 10

Addition, typically the simplest mathematical operation for young learners to comprehend, is defined as the act of combining numbers. The two (or more) numbers being combined are addends, and their total is the sum. Because the operation of addition describes sets of numbers being combined to form a new set, the order of the addends will not affect the sum.

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

Talk About It

Discuss the Try It! activity.

- Have children look at their completed trays and compare to other groups' trays.
- Ask: How many people did you put in the tray first? How many people did you add to the tray?
- **Say:** Look at your tray. Look at another group's tray.
- Ask: How many people are on the bus? Explain how you know.

Solve It

Ask children to draw pictures to show the people on the bus and write the corresponding number next to each group of people. Children should then circle the two groups and write the total number to show the sum.

More Ideas

For other ways to teach about addition with sums to 10-

- Have children make "addition boxes" by placing a cardboard divider in a shoe box (or other similar box). They can then put counters on each side, pull the divider out to combine them, and find the total number in the box.
- Have children make trains with Snap Cubes[®] and then add to the length of the trains with a different color to model addition.

Formative Assessment

Have children complete the following activity.

Samuel received 4 birthday presents from his family and 5 more presents from his friends. How many presents did he receive in all?



Try It! 30 minutes | Pairs

Here is a problem for introducing addition.

Shayna wants to know how many children are riding on the bus. There are 4 children near the back of the bus and 3 children near the front of the bus. How many children are on the bus?

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

Say: Let's follow the steps to determine how many children are on the bus.



1. Have children use their sorting trays and people counters to show the number of children near the back of the bus.



3. Encourage children to count aloud how many people are in their tray.

Materials

- CounTEN[®] Sorting Tray (1 per pair)
- Classifying Counters
 (7 people counters per pair)



2. Ask children to leave the people counters in their tray and add the number of children near the front of the bus to the tray.

A Look Out!

Watch for children who separate the two groups on opposite sides or ends of the tray and then fail to combine the two groups to count the total. Have children combine the two groups into one recognizable group in the tray and recount the whole new set.



Directions

1. Four dogs are at the dog park. Three more dogs come to the park. How many dogs in all are at the park? Use dog counters and the sorting tray to model the groups. Write how many total dogs there are. **2.** Three books were on the shelf. Five more books were put on the shelf. How many total books are on the shelf? Use counters to model the groups. Write the total number of books.

Check children's work.

Challenge

Alex had 5 fish in a tank. She bought 4 more fish for her tank. How many fish does she have in all? Draw the first group of fish. Draw a plus sign. Draw the second group of fish. Write the total number of fish.

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