

ACTIVITY 4.8

Make 10 on the Ten-Frame

Give students a mat with two ten-frames (see Figure 4.4). Flash cards are placed next to the ten-frames, or a fact can be given orally. The students should first model each number in the two ten-frames and then decide on the easiest way to show (without counting) what the total is. The obvious (but not the only) choice is to move counters into the frame showing either 8 or 9. Get students to explain what they did. Focus especially on the idea that 1 (or 2) can be taken from the other number and put with the 9 (or 8) to make 10. Then you have 10 and whatever is left.

Provide a lot of time with the make-ten activity. Encourage discussion and exploration of "easy ways" to think about adding two numbers when one of them is 8 or 9. Perhaps discuss why this is not a useful idea for a fact such as $6 + 5$ where neither number is near 10.

Note that children will have many other ways of using 10 to add with 8 or 9. For example, with the fact $9 + 5$, some will add $10 + 5$ and subtract 1. This is a perfectly good strategy, and it uses 10. You may want to give efficient strategies unique names determined by the children and discuss which ones seem especially useful.

When children seem to have the make-ten idea or a similar strategy, try the same activity without counters. Use the little ten-frame cards found in the Blackline Masters. Make a transparency set for the overhead. Show an 8 (or 9) card on the overhead. Place other cards beneath it one at a time. Suggest *mentally* "moving" two dots into the 8 ten-frame. Have students say orally what they are doing. For $8 + 4$, they might say, "Take 2 from the 4 and put it with 8 to make 10. Then 10 and 2 left over is 12." The activity can be done independently with the little ten-frame cards.

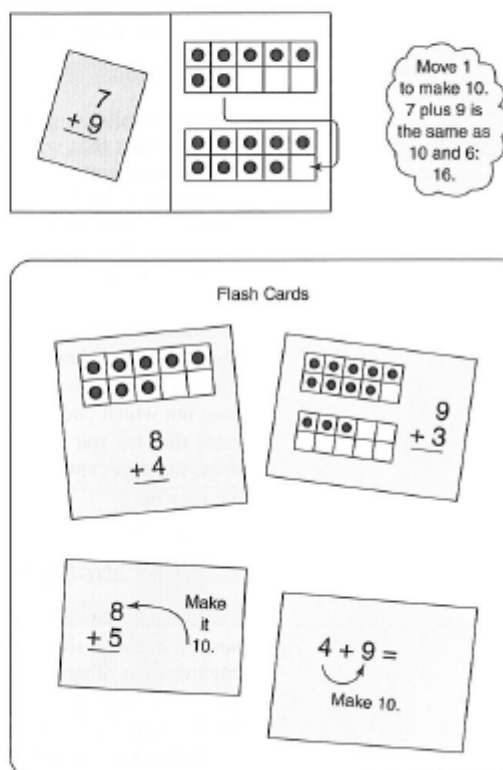


FIGURE 4.4
Make-ten facts.

From Van de Walle, J. A. & Lovin, L.H. (2006). *Teaching Student-Centered Mathematics Grades K – 3*. Toronto: Pearson Education, Inc. (p. 103).