

## 2 Develop the Concept: Interactive



10–15 min

# Interactive Learning

**Overview** In this activity, children will subtract multiples of ten from two-digit numbers.



**Essential Question** How do two-digit numbers change when multiples of ten are subtracted from them?

**Materials** Number Cards 0–11 (Teaching Tool 17, 1 set of cards 0–9 per child), connecting cubes (seven 10-cube towers per child), large opaque container



**Set the Purpose** *You have learned how to subtract tens from two-digit numbers using a hundred chart. Today you will subtract tens from two-digit numbers using connecting cubes.*

**Connect** Review how to subtract tens on the hundred chart. Then ask children to count back by tens from various two-digit numbers, such as 73. [73, 63, 53, ..., 13, 3]

### Pose the Problem

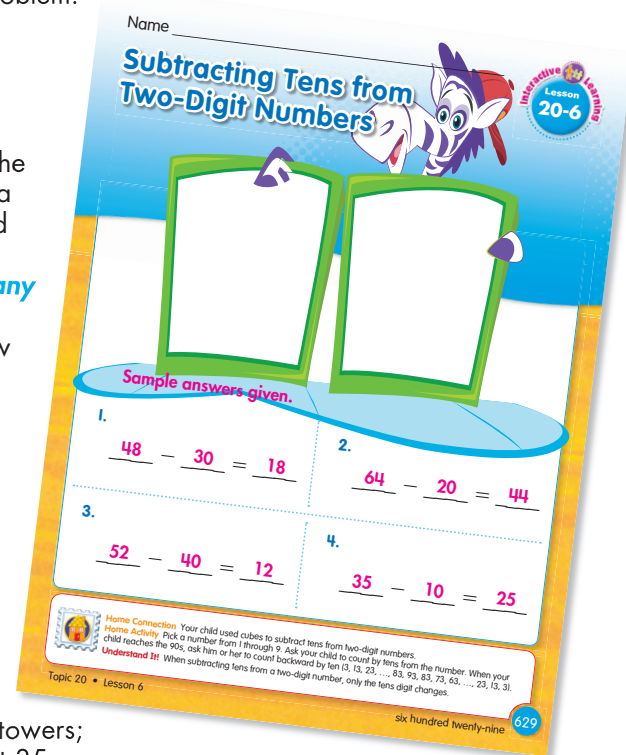
*Peter collected 48 cards. Then he gave 30 away. How many cards does Peter have left?* Have children use connecting cubes to solve the problem. Discuss their solutions and strategies.

### Instruct in Small Steps

*What do you need to do to solve the problem?* [Find  $48 - 30$ .] On the board, write  $48 - 30 = \underline{\quad}$ . Show the class 48 cubes (four 10-cube towers and 8 single cubes) and allow children to look at the tens and ones to check that you have 48. Then place the cubes in a large opaque container. Have the children put number cards 4 and 8 in the space provided on page 629 to remind them how many cubes are inside the container. *Peter gave 30 cards away. How many 10-cube towers would that be?* [3] Pull three 10-cube towers from the container. Have children use their connecting cubes to find how many cubes are left in the container.

### Whole-Class Discussion

Ask children to share their answers and methods with the class. Check children's answers by emptying the container to display the remaining cubes. Complete the subtraction sentence on the board:  $48 - 30 = 18$ . *When you subtract 30 from 48, what is the difference?* [18] *Which digit changed? Explain.* [The tens digit decreased by 3, because you subtracted 3 tens.] *Did the ones digit change? Explain.* [No; you weren't subtracting any ones.] Have children record the subtraction sentence in Item 1 on page 629. Repeat the activity several times with different numbers. Examples: Put 64 cubes in the container and remove two 10-cube towers; put 52 cubes in the container and remove four 10-cube towers; put 35 cubes in the container and remove one 10-cube tower.



Ask children to determine which number was subtracted if you started with 65 but now have 45. [20] Continue with other two-digit numbers and multiples of 10.

### Link to Investigations, Second Edition

*Joint-Usage Master Plan*  
Blended Instruction (Plan 1):  
Topic 20 and Unit 8