## MODELING UP TO 100 ON THE PLACE VALUE MAT

3.2-B4

Objective 3.2-B: For numbers 20-99, associate count, number name, number symbol, and place value meaning.

Sub-Objective: Model 1-99 on the place value mat.
Type of Lesson: Reinforcement
Instructional Method: Cooperative learning
Description: Given a whole number through 99 and a collection of 1-blocks, students build a block model of the number. Then, they reverse the digits and build a model of the second number.

Materials: 1-blocks, small holders, place value mats, dry erase markers, Activity Sheet 56 (1 page)

## Procedure

Set-up: Have a large collection of 1-blocks and small holders in the center of the table. Give each student a place value mat and a marker. Shuffle the digit cards and place them face down on the table. Put the two-place box (from the activity sheet) on the table.

1. Have one student pick the top card and place it, face up, in the ones' place in the twoplace box. Have a second student pick the top card and place it, face up, in the tens' place.
2. Tell students to use 1 -blocks and holders to construct a model (on their place value mats) of the number shown in the two-place box. Then, have them record the digits at the bottom of the mats. If necessary, remind students that it is not appropriate to write a ' 0 ' in the tens' place for a one-digit number.
3. Ask students to compare their models. Help them determine and fix any error(s) in incorrect models.
4. Ask one of the students to reverse the digit cards in the two-place box. Ask, "Will the block model for this number be the same as the block model for (the previous number)?" (No) "Why will it be different?" (Because the number of ones and the number of tens are different now)
5. Have students rebuild their model to represent the second number and record the new number. (Depending on the digit cards, students may need to unpack their blocks-of-10 and/or take some 1-blocks from the collection.)
6. Repeat steps 1-5 until students are able to build correct models of a variety of numbers through 99.

Evidence of Learning: The student builds correct block models for whole numbers through 99.

