

Give & Take

Grade 2

Activity 206

Correlations to *The Digi-Block Program: Number Sense and Operations for the Elementary Grades Comprehensive Teacher's Guide*

Book II, Unit 2-5: Seeing Patterns in the Count, pages 41 - 43

Book III, Unit 1-4: Seeing Patterns in the Count, pages 26 - 29

Topic Overview

Students will add and remove a block-of-10 or single block from the Place mat and observe how it changes the number.

Objectives

Thinking Skills: Students use the base ten model for quickly and efficiently adding/removing ten, rather than counting on or back ten.

Mastery Skills: Students name 2-digit numbers by observing blocks-of-10 and ones on a Place Mat. They add/remove one or ten and note how the number changes.

Materials

For the Class Demonstration, each pair of students needs:

- One Place mat
- (10) blocks-of-10, and (10) singles

For the Student Pair Activity, each pair needs:

- One Place mat
- Supply of blocks-of-10 and singles
- Die, labeled +1, +1, -1, +10, +10, -10 (Note: You can use stickers to cover the dots on a regular die. Or take a blank wooden cube and write on it in pencil or pen.)
- "Give and Take" Score sheet

Class Introduction

(10-15 minutes)

Explain that "Give and Take" is a quick-moving activity and that students need to listen especially carefully as they work with the blocks.

Pass out materials and designate partner roles.

- One student is in charge of the singles and sits to the right of the mat.
- The second student manages the blocks-of-10.

To begin, play a round of "Give" only. Students will hear commands, more slowly at first, about which block(s) to "give" to their mat, and then they will name the new number they see in unison. When the students catch on to the activity, pick up the pace. Record each number in a column on chart paper as they are named.

Have all students begin with the same number of blocks on their mats. In this first example, have everyone start with 2 blocks-of-10 and 3 ones on their mats.

- Ask, **How many?** (Students say together, "23")
- **Give one.** (The student managing singles places one block on the mat.)
How many? (24)
- **Give one. How many?** (25)
- **Give one. How many?** (26)
- **Give ten.** (This time, the student managing blocks-of-10 places a block on the mat.) **How many?** (36)
- **Give ten. How many?** (46)
- **Give one. How many?** (47)
- **Give ten. How many?** (57)

- **Give ten. How many (67)**
- **Give one. How many? (68)**
- **Give ten. How many? (78)**
- **Give one. How many? (79)**
- **Give ten. How many (89)**
- **Give ten. How many? (99)**
- If students are up for the challenge and discussion, say "Give one" to make 100!

Depending on students' levels, continue playing additional rounds of "Give," or play "Take," where blocks-of-10 and singles are removed from the mat. Finally, play "Give and Take" where students make the number on their mat larger and OR smaller by adding and removing blocks-of-10 and singles.

An example of "Give and Take" follows:

- **Begin with 4 blocks-of-10 and 6 ones. How many? (46)**
- **Take ten. How many? (36)**
- **Give one. How many? (37)**
- **Give one. How many? (38)**
- **Give ten. How many? (48)**
- **Take one. How many? (47)**
- **Take one. How many? (46)**
- **Give ten. How many? (56)**
- **Give one. How many? (57)**
- **Give ten. How many? (67)**
- **Give one. How many? (68)**
- **Give one. How many? (69)**
- **Give one. How many? (70! - students pack and move a block-of-10)**

Also, include instances where students "take one" from a multiple of 10. For example, take one from 50.

Activity

(15-20 minutes)

Organize students in groups of four (two teams of 2) to play "Give and Take From 20."

- One student in each pair is the Recorder and the second student is the Block Manager.

- Each student pair will play with another pair.

Before play, have students determine and write the criterion for the winning score. Some examples are - the smallest final number, the largest final number, the number closest to 50, the number with the largest digit in the ones (or tens) place, etc.

Have each team begin with 2 blocks-of-10, or 20, on the mat. Student pairs take turns rolling the die. The Block Manager gives or takes the indicated block to or from the mat. The Recorder writes each new number on the score sheet.

Pairs repeat the procedure ten times switching the role of recorder and block manager accordingly. They name their final number and compare it to the opposing team's to determine the winner.

Closure

(10-15 minutes)

While playing class rounds, notice and discuss how a number changes when a block-of-10 or single block is added to the mat. Refer to the column of numbers recorded on chart paper:

- When removing or adding one single block, it becomes the counting number before or after.
- When adding or removing a block-of-10, only the tens place changes. This is a "shortcut" to show 10 more or less. Some students may need to be convinced of this. Demonstrate counting up or back ten to help students make sense of this, and to illustrate that it "works." A number line or Counter may be useful.

During and after playing "Give and Take From 20," have students share their tenth, or final numbers. List them.

- Discuss the fact that although they all started with 20, the outcomes were all very different after 10 rolls of the die!
- Ask, Which number is largest? Smallest? Changed the most? How do you know?

Assessment

As students work, observe and note:

Do they-

- Readily "see" and recognize a numeral represented by packed blocks-of-10 and ones on the Place Mat?
- Name a "changed" number without counting up or back by one or ten?
- Understand the connection between adding/removing a block-of-10 and counting up/back ten?

Extension

- Give students a starting and ending number. Have them list possible "rolls" (+1, -1, +10, or -10) to arrive at the ending number. For example: Start at 26. End at 73. What did I roll? How did the number change?
- Have students be "Give and Take" Detectives! Students study their Score Sheets from the game and use these numbers as clues to determine what was rolled (+1, -1, +10, or -10) during each round of the game. Students record these changes on the Score Sheet.
- Include blocks-of-100 and play Give and Take. Add a Hundreds column to the Score Sheet and play Give and Take From 200. Have students start with 100 blocks on their Place mats so that they can exercise the hurdle from 99 to 100.