## Lucky Number

Grade 1
Activity 109
Correlations to The Digi-Block Comprehensive Teacher's Guides:
Book I: Unit 2-3: Using the Counter to Tell How Many, pages 39-42
Book II: Unit 2-2: Introducing the Counter, pages 30-32

## Overview

Each day, a student picks a 2-digit number out of a bag. The student loads the correct number of blocks onto the Counter and represents the number using stamps, drawings, and/or fill-in paper. This representation is posted in a prominent place for the day.

Objectives
Thinking Skills: Students choose strategies about how to use blocks to represent a 2-digit number in base ten. They link their understanding of single blocks with packed blocks and the corresponding digits.

Mastery Skills: Students learn to represent numbers 10-99 with blocks-of-10 and single blocks.

Materials
In a center or math station, have the following materials available:

- A bag with the some numbers between 10 and 99 on slips of paper (Cut out the "Lucky Numbers" cards provided or make your own.)
- 100 single blocks
- 20 small holders
- 10 blocks-of-10
- 12 -place Counter
- Fill-in paper (Erik - We need page 5 of the Activity and Assess Sheets packet for the level 1 teacher guide... But we need to take out "Activity Sheet 5 " in the footer.)
- Stamps (optional)
- Markers (Digi-green color if available)
- Blank Paper

Each student needs:

- 1 "Lucky Number" Activity Sheet
- 1 Fill-in paper


## Class Introduction

(10-20 minutes)
For the first few days, select a lucky number together as a class, have a student load the correct number of blocks on the Counter, and have all students represent the number using drawings, stamps, and fill-in paper.

Select a student to choose the first lucky number of the day by picking a number from the bag. Have the student:

- Pick a lucky number out of the bag.
- Load the indicated number of blocks onto the Counter for the class to see. [Note-Students may need to count and place blocks one at a time. Other students may be ready to use blocks-of-10 and single blocks.]
- Set the digits on the dials at the bottom of the Counter.
- Write the number of blocks-of-10 and single blocks on the white board at the bottom of the Counter.

Ask other students to verify that the correct number is on the Counter. Students should recognize that:

- They can count the number of blocks-of-10 on the Counter and the number of single blocks separately and check to see that the digits match these quantities. (For example, if there are 8 blocks-of-10 and 2 single blocks showing on the Counter, they should have an 8 on the
dial underneath the blocks-of-10 and they should have a 2 on the dial underneath the single blocks.)
- The number represented on the Counter and by the digits on the dials should match the lucky number they selected from the bag.

Pass out the fill-in paper and the activity sheet. Have markers and stamps available. Have all students complete the fill-in paper for the lucky number of the day and then make their own representations of the lucky number by using stamps and drawings.

Activity (5-15 minutes)
After several days of modeling, explain that everyday a new student will be chosen to select a lucky number and to make a representation of the number. Put all materials in a math center and set up a schedule so that all students have a turn to pick a lucky number of the day.

Each day, a student will:

- Pick a lucky number from the bag.
- Load the correct number of blocks on the Counter.
- Represent the number using stamps, drawings, or fill-in paper.

Post the student-made representation of the lucky number in a prominent place for the day. This visual image will be a daily reminder of base ten images of number and serve as a discussion

Closure
(5-15 minutes)
On occasion discuss the lucky number of the day. Ask the student to describe to you (or the class if appropriate):

- How he/she loaded the blocks. (Did the student load blocks one-at-a time? Was the student able to use already packed blocks-of-10?)
- Any difficulties along the way. (Did the student need to seek out some help from a friend?)
- How many blocks-of-10 are in the number.
- How many single blocks are in the number.

Questions for discussion:

- If we unpacked all the blocks from the lucky number loaded onto the Counter, how many single blocks would we have?
- If we unpacked all the blocks in the lucky number and lined them all up along a number line, where would the blocks end?


## Assessment

General questions to guide assessment:

- Does the student count out all single blocks and load them one at a time?
- Is the student flexible in his/her thinking regarding packed and unpacked blocks. For example, if there are not enough packed blocks, does the student know to pack enough blocks-of-10 or does he/she seek out blocks-of-10 from elsewhere?
- Does the student connect the number of single blocks in the number with the digits and the base ten representation of the number?
- Is the student representation accurate? Does he/she clearly identify blocks-of-10 and single blocks?


## Extensions

- Have students use blocks to represent the lucky number of the day in all different, but equivalent, ways. For example, if the lucky number is 47 , have students represent the number using 4 blocks-of10 and 7 ones, 3 blocks-of-10 and 17 ones, 2 blocks-of-10 and 27 ones, and so on.
- Have children take the blocks off the Counter and remove the covers from the blocks-of-10. Together, count all the single blocks inside the lucky number.
- Use the lucky number in various contexts throughout the day. For example, have students count by ones, twos, or tens from the lucky number forward as the line-up for a transition. Have students count backward from the lucky number. Use the lucky number in word problem contexts. Discuss temperature; i.e., in terms of the lucky number, would today be a cold day or a hot day? Compare to the actual temperature.

