Unit 4, Lesson 8

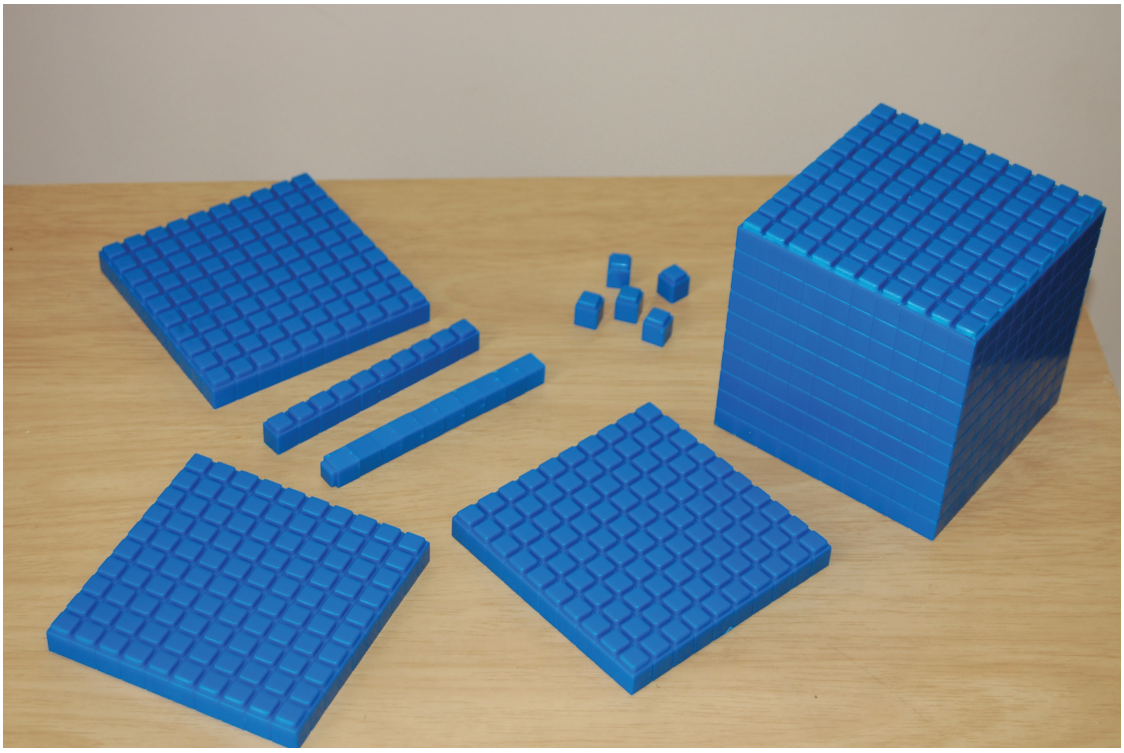
# Beyond 100,000

Let’s read, write, and represent numbers beyond 100,000.

Warm-up

## How Many Do You See: Base-ten Blocks

How many do you see? How do you see them?

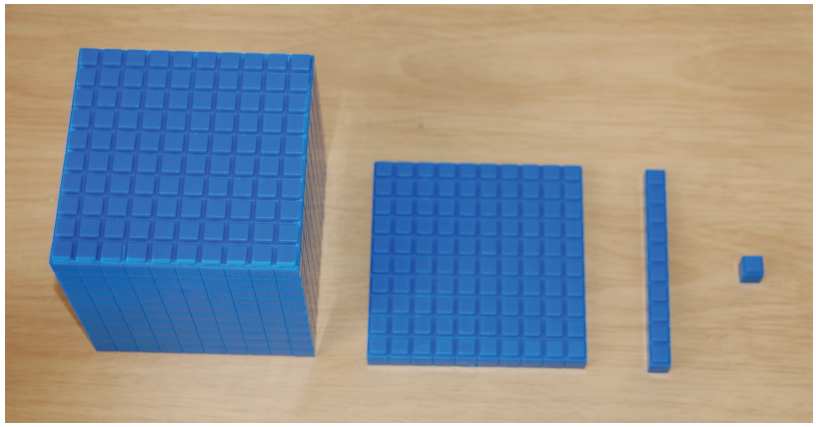


Activity 1

## Lin's Representation

1. Use base-ten blocks or draw a base-ten diagram to represent 15,710.

2. Lin uses blocks like these to represent 15,710. She decides to change the value of the small cube to represent 10.



What is the value of each block if the value of the small cube is 10?

a. Small cube: 10

b. Long rectangular block: _____

c. Large square block: _____

d. Large cube: _____

3. Use Lin's strategy to represent 15,710.

4. Use Lin's strategy to represent each number.

   a. 23,000

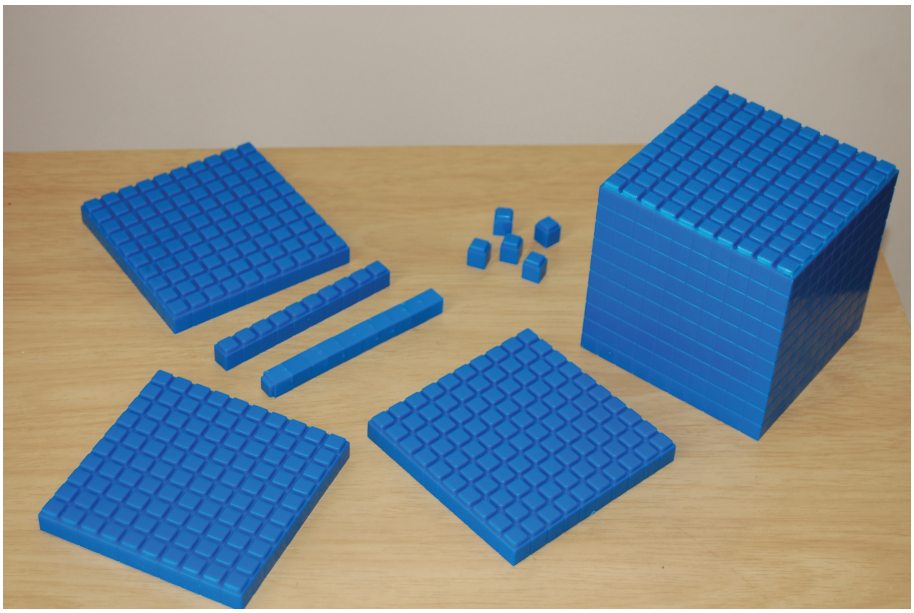
   b. 58,100

   c. 69,470

5. Which base-ten blocks would you use to represent 100,000?

Activity 2

## What Number is Represented?



1. A small cube represents 1. What value do the blocks in the picture represent?

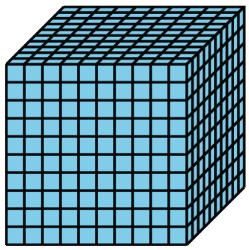
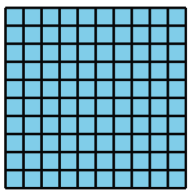
2. A small cube is now worth 10. What is the new value the blocks in the picture represent?

3. Write two statements comparing the numbers used in your base-ten representations.

Activity 3

## Build Hundred-thousands

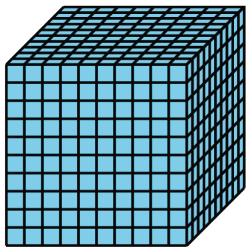
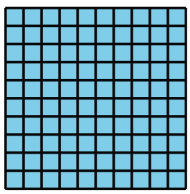
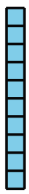
1. Lin changes the value of the small cube to 10 to represent large numbers. She uses these blocks to represent her first number.

| type of block |  |  |  |  |
|---|---|---|---|---|
| number of blocks used | 4 | 9 | 8 | 3 |

   a. What number did Lin represent? Explain or show your reasoning.

   b. Write an equation to represent the value of the blocks.

2. She used more blocks to represent another number.

| type of block |  |  |  |  |
|---|---|---|---|---|
| number of blocks used | 10 | 20 | 4 | 5 |

   a. What number does Lin represent? Explain or show your reasoning.

   b. Write an equation to represent the value of the blocks.