Lesson 6: How Much is 10,000?

Standards Alignments

Addressing   4.NBT.A.1
Building Towards   4.NBT.A.1

Teacher-facing Learning Goals

- Develop a sense of the relative magnitude of 10,000.
- Recognize ten-thousand as 10 groups of 1,000.

Student-facing Learning Goals

- Let's represent 10,000.

Lesson Purpose

The purpose of this lesson is to develop a relative sense of ten-thousand and understand it as a unit consisting of 10 units of one-thousand.

In this lesson, students build on their understanding of the base-ten structure to develop a sense of the magnitude of 10,000. They first use base-ten blocks and base-ten diagrams to build four-digit and five-digit numbers. They then use a 10-by-10 grid to represent 100 and work together to build a representation of 1,000, and then 10,000. Students may notice the inherent multiplicative structure of the 10-by-10 grids or the array of 10,000 and use counting strategies to identify significant groups of 10 (for example, 10 groups of 100 and 10 groups of 1,000).

Access for:

♿ Students with Disabilities

- Engagement (Activity 1)

🌐 English Learners

- MLR8 (Activity 2)

Instructional Routines

What Do You Know About _____? (Warm-up)

Materials to Gather

- Base-ten blocks: Activity 1

Materials to Copy

- Build Numbers (1-5 Digit Cards) (groups of 4): Activity 1
- 10-by-10 Square Grids (groups of 1): Activity 2

Lesson Timeline

Warm-up	10 min
Activity 1	15 min
Activity 2	20 min
Lesson Synthesis	10 min
Cool-down	5 min

Teacher Reflection Question

What did you see or hear students say during the lesson that suggests they have some sense of the relative magnitude of 10,000 in relation to 1,000 and 100?

Cool-down (to be completed at the end of the lesson)   🕐   5 min

Represent Numbers

Standards Alignments

Addressing   4.NBT.A.1

Student-facing Task Statement

1. How many thousands are in 12,000?

2. Draw a diagram to represent 15,400.

Student Responses

1. Twelve thousands

2. A diagram showing 1 unit of ten-thousand, 5 units of a thousand, and 4 units of a hundred