

Lesson 1: What is One Thousandth?

Standards Alignments

Addressing 5.NBT.A, 5.NBT.A.1

Teacher-facing Learning Goals

- Understand the relationship between one tenth, one hundredth and one thousandth.

Student-facing Learning Goals

- Let's make sense of thousandths.

Lesson Purpose

The purpose of this lesson is for students to recognize the unit of thousandths in relationship to tenths and hundredths.

In grade 4, students studied decimal fractions with denominators 10 and 100. They represented tenths and hundredths with hundredths grids, number lines, and decimal notation.

In this lesson students make sense of representations of tenths, hundredths, and thousandths with hundredths grid diagrams, fractions, and decimals. They also see relationships between these values, namely that a tenth of a tenth is a hundredth and a tenth of a hundredth is a thousandth. Students may use informal language to describe the relationship between decimals (for example, to get from 0.01 to .001 you add a zero in front of the one.) This language supports students in sharing their developing understanding. Teachers should ask questions to help students develop more precise language to describe base-ten representations (for example, what does the extra 0 you wrote in .001 represent?). They will have many opportunities to develop this understanding in upcoming lessons.

Access for:

Students with Disabilities

- Representation (Activity 1)

English Learners

- MLR7 (Activity 2)

Instructional Routines

Estimation Exploration (Warm-up)

Materials to Gather

- Chart paper: Activity 1
- Colored pencils, crayons, or markers:

Materials to Copy

- Small Grids (groups of 1): Activity 1

Activity 1

Lesson Timeline

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

Teacher Reflection Question

Why is it important to integrate students' lived experiences into the classroom community?
How might this integration empower students?

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

🕒 5 min

Journal Prompt: One Thousandth

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Student-facing Task Statement

What did you learn about 1 thousandth? What do you still wonder about 1 thousandth?

Student Responses

Sample responses: One thousandth can be represented on a grid. It can be written as 0.001. It's really small. It is one tenth of one hundredth. I wonder if there is something smaller than 1 thousandth.