Lesson 4: Mismo tamaño, tamaños relacionados

Standards Alignments

Building On	3.NF.A.2, 3.NF.A.2.a, 3.NF.A.3.b
Addressing	4.NF.A.1
Building Towards	4.NF.A.1

Teacher-facing Learning Goals

- Use the relationships between fractions whose denominators are multiples of one another (for instance $\frac{1}{2}$, $\frac{1}{4}$, and $\frac{1}{8}$) to locate fractions on the number line.
- Use visual representations to reason about fractions that have the same size. Recall that these fractions are equivalent.

Student-facing Learning Goals

- Encontremos algunas fracciones que tengan el mismo tamaño.

Lesson Purpose

The purpose of this lesson is for students to use visual representations to reason about the fractions that have the same size and to locate them on the number line.

In grade 3, students reasoned about equivalent fractions, using fraction strips, tape diagrams, and number lines. Here, they begin to revisit the idea of equivalence. Students examine fractions that have the same size but are expressed with different numerators and denominators. They use diagrams of fraction strips, now expanded to include fractions with denominator 10 and 12, and then transition to using number lines to support their reasoning.

The relationships between fractions such as $\frac{1}{4}$ and $\frac{1}{8}$, $\frac{1}{5}$ and $\frac{1}{10}$, and $\frac{1}{6}$ and $\frac{1}{12}$, in which one denominator is a multiple of the other, continue to be highlighted and offer many opportunities for students to look for and make use of structure (MP7).

Later in the unit, students will take a closer look at equivalence and investigate new ways to reason about equivalence.

As in earlier activities, rulers can be provided to help students draw, extend, or align partition lines, but should not be used to measure the location of a fraction.

Access for:

Students with Disabilities

- Engagement (Activity 1)

Instructional Routines

MLR5 Co-craft Questions (Activity 2), Notice and Wonder (Warm-up)

Materials to Gather

- Straightedges: 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

This lesson is students' first experience with the number line in grade 4. What understandings or misunderstandings about the number line did you observe today as students worked? Did you see students relating the idea of partitioning a tape diagram to partitioning a number line?

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

5 min

¿En qué lugar de la recta numérica?

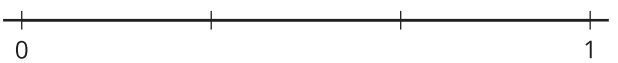
Standards Alignments

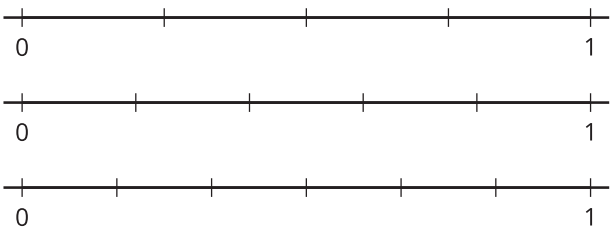
Addressing 4.NF.A.1

Student-facing Task Statement

Ubica y marca cada fracción en una de las rectas numéricas. Muestra tu razonamiento.

$\frac{3}{6}$ $\frac{2}{10}$ $\frac{6}{8}$ $\frac{4}{12}$





Student Responses

Sample response: