Lesson 19: Flexibilidad con fracciones (Optional)

Standards Alignments

Addressing	4.NF.B.3.c, 4.NF.B.3.d, 4.NF.B.4, 4.NF.C.5
Building Towards	4.NF.B.3.d, 4.NF.B.4

Teacher-facing Learning Goals

- Interpret and solve problems that involve the addition, subtraction, and multiplication of fractions.

Student-facing Learning Goals

- Resolvamos todo tipo de problemas en los que hay fracciones.

Lesson Purpose

The purpose of this lesson is for students to interpret and solve problems that involve adding, subtracting, and multiplying fractions.

This optional lesson gives students additional opportunities to integrate and apply the work from this unit to solve novel contextual problems. All three activities prompt students to make sense of and persevere in solving problems that involve adding, subtracting, and multiplying fractions. In the first two activities, students think abstractly and quantitatively to relate their calculations to a situation (MP2). The last activity encourages students to identify structure in expressions with many different operations involving fractions (MP7).

Completing all three activities will take more than 60 minutes. Consider expanding the lesson across 2 days or selecting one or two activities based on students' needs or interests and time constraints.

Access for:

♿ Students with Disabilities

- Representation (Activity 1)

Instructional Routines

MLR6 Three Reads (Activity 2), Notice and Wonder (Warm-up)

Materials to Gather

- Rulers (inches): Activity 1
- Sticky notes: Activity 1

Materials to Copy

- Find a Match (groups of 24): Activity 3

- Tools for creating a visual display: Activity 3

Lesson Timeline

Warm-up	10 min
Activity 1	25 min
Activity 2	20 min
Activity 3	25 min
Lesson Synthesis	5 min
Cool-down	5 min

Teacher Reflection Question

What evidence did you see of students thinking flexibly and choosing a method strategically as they worked to solve problems? For students who chose a fixed way of reasoning about fractional amounts, what questions could you ask to prompt them to be more strategic?

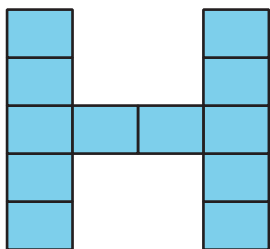# Cool-down (to be completed at the end of the lesson)   🕐   5 min

El diseño de Han

Standards Alignments

Addressing   4.NF.B.3.d, 4.NF.B.4

Student-facing Task Statement

Han usa notas adhesivas pequeñas para armar una figura en forma de H y decorar un cuaderno de 6 pulgadas de ancho y 9 pulgadas de alto. Este es su diseño.

El lado más largo de la nota adhesiva mide $\frac{15}{8}$ pulgadas. El lado más corto mide $\frac{11}{8}$ pulgadas.

¿El cuaderno tiene la altura suficiente para su diseño? Muestra tu razonamiento.

Student Responses

Yes. Sample response: The H shape is $5 \times \frac{11}{8}$ or $\frac{55}{8}$ inches tall. The notebook is $9 \times \frac{8}{8}$ or $\frac{72}{8}$ inches tall.