Lesson 17: Interpret Diagrams

Standards Alignments

Addressing 5.NF.B.5.a, 5.NF.B.5.b

Teacher-facing Learning Goals

- Compare the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated multiplication.

Student-facing Learning Goals

- Let's compare products without multiplying.

Lesson Purpose

The purpose of this lesson is for students to compare the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated multiplication.

In the previous lesson, students compared products in a way that made sense to them, including finding the value of the product. In this lesson, students focus on other ways to compare a product to one of the factors. First, they match products with diagrams. This helps them to think about the meaning of the product as well as giving them a visual representation which they can use to help see the comparison. In the second activity, students use this general understanding to compare products where one of the factors is not known, requiring them to make the comparisons based on the size of the other factor. It is important that students connect their products to the corresponding situations and representations (MP2).

Access for:

Students with Disabilities

- Representation (Activity 2)

English Learners

- MLR6 (Activity 2)

Instructional Routines

Estimation Exploration (Warm-up)

Lesson Timeline

Warm-up	10 min
Activity 1	20 min

Teacher Reflection Question

What question do you wish you had asked today? When and why should you have asked it?

Activity 2	15 min
Lesson Synthesis	10 min
Cool-down	5 min

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

Read Books

Standards Alignments

Addressing 5.NF.B.5.a

Student-facing Task Statement

Diego, Kiran, Elena, and Mai were reading a book.

- Diego read 40 pages.
- Elena read $\frac{7}{8}$ times as many pages as Diego.
- Mai read $2\frac{1}{2}$ times as many pages as Diego.
- Kiran read $\frac{4}{5}$ times as many pages as Diego.

Write the 4 names in order of how many pages they read from least to greatest.

Student Responses

Kiran, Elena, Diego, Mai