Lesson 10: Concepts of Division (Optional)

Standards Alignments

Building On4.NBT.B.6Building Towards5.NF.B.7

Teacher-facing Learning Goals

• Reason about the size of quotients in division problems.

Student-facing Learning Goals

• Let's think about the size of quotients.

Lesson Purpose

The purpose of this lesson is for students to reason about the size of a quotient and consider the relationships between the dividend, divisor, and quotient.

In this optional lesson, students revisit whole number division considering the relationship between dividend, divisor, and quotient. This lesson attends to concepts of division developed since grade 3. Students examine the relationship between the numbers in division problems and compare the size of the quotient by reasoning about the relative sizes of the divisor and dividend. This prepares them to make sense of division involving whole numbers and unit fractions in subsequent lessons.

Access for:

Students with Disabilities

• Representation (Activity 2)

Instructional Routines

MLR2 Collect and Display (Activity 1), Number Talk (Warm-up)

Lesson Timeline

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

Teacher Reflection Question

What did you see or hear in your students' responses today that showed evidence of their understandings of division? How will you leverage this understanding in the rest of this section?



Cool-down

5 min

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

① 5 min

Reason About Division

Standards Alignments

Building Towards 5.NF.B.7

Student-facing Task Statement

- 1. What new idea did you have about division today?
- 2. What questions do you have about division with fractions?

Student Responses

Sample responses:

- 1. There is a pattern that when the dividend remains the same and the divisor gets smaller, the quotient gets larger.
- 2. Is dividing fractions the same as dividing whole numbers? How do you divide something by $\frac{1}{2}$?