

Lesson 4: Division Situations

Standards Alignments

Addressing 5.NF.B.3

Teacher-facing Learning Goals

- Solve problems involving division of whole numbers leading to answers in the form of fractions.

Student-facing Learning Goals

- Let's solve and represent division problems.

Lesson Purpose

The purpose of this lesson is for students to solve division problems when the quotient is a fraction or mixed number.

In previous lessons students solved equal sharing problems involving division of whole numbers with answers in the form of mixed numbers and fractions using diagrams. They noticed patterns and made generalizations about the relationship between the expression $a \div b$ and the fraction $\frac{a}{b}$ for specific values of a and b . Students have observed that the numerator of the fraction is the number of objects being shared, while the denominator is the number of equal shares. This lesson brings all of these ideas together through contexts, equations, and diagrams. Students continue to notice patterns across these contexts and build flexibility with interpreting fractions in terms of division by creating their own situations. Fluently moving between representations gives students the ability to choose an appropriate representation to solve a problem (MP1).

Consider what division situations students or their families might be familiar with. Measurement contexts often present situations when division results in a fraction or mixed number. For example, making something with fabric, dividing large amounts of food in to smaller containers, or measuring and cutting wood for a project.

Access for:

Students with Disabilities

- Engagement (Activity 2)
- Representation (Activity 1)

Instructional Routines

Number Talk (Warm-up)

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

What strategies are students using to divide numbers that result in a quotient that is a fraction or mixed number? What questions have you asked that encourage students to see the relationship between the dividend and the numerator and the divisor and the denominator?

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

 5 min

How Much Milk?

Standards Alignments

Addressing 5.NF.B.3

Student-facing Task Statement

Complete the table below.

Equation	Situation
	5 children share 4 cups of milk so each child gets the same amount of milk. How many cups of milk will each child get?
Diagram	

Student Responses

$$4 \div 5 = \frac{4}{5}$$

