

Unit 8 - Fractions

Content Area: **Mathematics**
Course(s):
Time Period: **January**
Length: **3-4 weeks**
Status: **Published**

Unit Overview

Unit 8 connects with the theme of Now We're Cooking!, which centers around food such as fruits, vegetables, pizza, salsa, sandwiches, and desserts. Students learn the different aspects of fractions, and that fractions can be represented using different types of models, drawings, and diagrams. When students understand these representations, they will be able to use logical reasoning to construct valid arguments and justify conclusions in problemsolving situations.

Essential Questions

"How can different fractions name the same amount?"

Content

Factors and Multiples

Prime and Composite Numbers

Hands On: Model Equivalent Fractions

Equivalent Fractions

Simplest Form

Compare and Order Fractions

Use Benchmark Fractions to Compare and Order

Problem-Solving Investigation: Use Logical Reasoning

Mixed Numbers

Mixed Numbers and Improper Fractions

Skills

Find factors and multiples of whole numbers.

Determine if a number is prime or composite.

Explore equivalent fractions.

Find equivalent fractions.

Write a fraction in simplest form.

Compare and order fractions.

Use benchmark fractions to compare and order numbers.

Use logical reasoning to solve problems.

Represent mixed numbers by decomposing them into a sum of whole numbers and unit fractions.

Write mixed numbers and improper fractions.

Assessments

Online Readiness Quiz

Vocabulary Check

Concept Check - Check My Progress

Chapter Test

Teacher Observation

Lessons/Learning Scenarios

MyMath Grade 4

Chapter 8: Lessons 1-10

Standards

CCSS.Math.Content.4.NF.A.1	Explain why a fraction a/b is equivalent to a fraction $(n \times a)/(n \times b)$ by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions.
CCSS.Math.Content.4.NF.A.2	Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as $1/2$. Recognize that comparisons are valid only when the two fractions refer to the

	same whole. Record the results of comparisons with symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model.
CCSS.Math.Content.4.NF.B.3.d	Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem.
CCSS.Math.Content.4.NF.B.4.a	Understand a fraction a/b as a multiple of $1/b$.
CCSS.Math.Content.4.OA.B.4	Find all factor pairs for a whole number in the range 1–100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1–100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1–100 is prime or composite.

Resources

MyMath Grade 4: McGraw-Hill (2012)

- hundred chart
- poster of a hundred chart
- grid paper
- counters
- crayons or colored pencils
- fraction tiles
- rulers
- a set of 6 blue cards, 4 red cards, and 2 yellow cards to each of 12 students
- coins
- fraction circles
- paper plates
- scissors