

Feb. Gr 4 My Math Unit 8: Fractions

Content Area: **Math**
Course(s):
Time Period: **February**
Length: **4-5 Weeks**
Status: **Published**

Unit Overview

Students will learn about fractions.

Enduring Understandings

We can find factor pairs of whole numbers.

We can model equivalent fractions.

We can find a fraction that is equivalent to another fraction.

We can compare fractions by using a benchmark fraction.

Essential Questions

How can different fractions name the same amount?

Instructional Strategies & Learning Activities

Lesson	Objective	Material & Manipulatives	Vocabulary	Standard
Lesson 1 pp. 485-490 Factors and Multiples	Find factors and multiples of whole numbers.	<ul style="list-style-type: none">• hundred chart	factor pairs	4.OA.4 Supporting Cluster MP 1, 2, 4, 5, 6, 7, 8
Lesson 2 pp. 491-496 Prime and Composite Numbers	Determine if a number is prime or composite.	<ul style="list-style-type: none">• poster of a hundred chart• grid paper• counters	prime number composite number	4.OA.4 Supporting Cluster MP

1, 2, 3, 4,
6, 7, 8

Check My Progress

Lesson 3 pp. 499-504
Hands On: Model
Equivalent Fractions

Explore equivalent fractions.

- grid paper
- crayons or colored pencils
- fraction tiles
- rulers

numerator
denominator
equivalent
fractions

4.NF.1
Major
Cluster

MP
1, 2, 3, 4,
5, 8

Lesson 4 pp. 505-510
Equivalent Fractions

Find equivalent fractions.

- a set of 6 blue cards, 4 red cards, and 2 yellow cards to each of 12 students

4.NF.1
4.NF.5

Major
Cluster

MP
1, 2, 4, 7,
8

Lesson 5 pp. 511-516
Simplest Form

Write a fraction in simplest form.

- coins
- fraction tiles
- counters

simplest form
greatest
common factor

4.NF.1
Major
Cluster

MP
1, 3, 4, 6,
7

Lesson 6 pp. 517-522
Compare and Order
Fractions

Compare and order fractions.

- fraction circles
- fraction tiles

least common
multiple

4.NF.2
Major
Cluster

MP
1, 2, 3, 5,
6

Lesson 7 pp. 523-528
Use Benchmark Fractions
to Compare and Order

Use benchmark fractions to compare and order numbers.

- fraction tiles

benchmark
fractions

4.NF.2
Major
Cluster

MP
1, 2, 3, 4,
5, 7

Check My Progress

Lesson 8 pp. 531-536
Problem-Solving
Investigation: Use
Logical Reasoning

Use logical reasoning to solve problems.

4.NF.2
Major
Cluster

MP
1, 2, 3, 5

Lesson 9 pp. 537-542 Mixed Numbers	Represent mixed numbers by decomposing them into a sum of whole numbers and unit fractions.	<ul style="list-style-type: none"> • fraction circles • ruler 	mixed number	4.NF.3 4.NF.3b	Major Cluster
Lesson 10 pp. 543-548 Mixed Numbers and Improper Fractions	Write mixed numbers and improper fractions.	<ul style="list-style-type: none"> • paper plates • scissors 	improper fraction	4.NF.3	Major Cluster
				MP 1, 2, 3, 4, 5, 6, 7	
				4.NF.3	Major Cluster
				MP 1, 2, 3, 4, 5, 6, 8	

My Review and Reflect

Integration of Career Readiness, Life Literacies and Key Skills

TECH.9.4.5.DC.4	Model safe, legal, and ethical behavior when using online or offline technology (e.g., 8.1.5.NI.2).
TECH.9.4.5.CT.3	Describe how digital tools and technology may be used to solve problems.
TECH.9.4.5.CT	Critical Thinking and Problem-solving
WRK.9.2.5.CAP	Career Awareness and Planning
WRK.9.2.5.CAP.1	Evaluate personal likes and dislikes and identify careers that might be suited to personal likes.
WRK.9.2.5.CAP.2	Identify how you might like to earn an income.
WRK.9.2.5.CAP.3	Identify qualifications needed to pursue traditional and non-traditional careers and occupations.
WRK.9.2.5.CAP.4	Explain the reasons why some jobs and careers require specific training, skills, and certification (e.g., life guards, child care, medicine, education) and examples of these requirements.

Technology and Design Integration

- SMARTboard technology
- Google Applications (documents, forms, spreadsheets, presentation)
- Dreambox
- Online textbook

	Data can be organized, displayed, and presented to highlight relationships.
CS.3-5.8.1.5.DA.1	Collect, organize, and display data in order to highlight relationships or support a claim.
CS.3-5.DA	Data & Analysis

Interdisciplinary Connections

Leveled readers, "Life in the United States"

LA.RI.4.4	Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a grade 4 topic or subject area.
LA.RI.4.1	Refer to details and examples in a text and make relevant connections when explaining what the text says explicitly and when drawing inferences from the text.
LA.SL.4.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 4 topics and texts, building on others' ideas and expressing their own clearly.

Differentiation

-Reteach Master

-Hands-On Activity

-Enrich Master

Modifications & Accommodations

IEP and 504 accommodations will be utilized.

Provide an outline of material to be covered

-Individualized assignments, e.g., length, number, due date, topic

-Allow student to use technology-online textbook

-Use of graphic organizers

-Use highlighter for key information

-Read directions, passages, and word problems aloud as needed-online presentation

-Use of calculator and matrix for multiplication and division

-Provide textbook in audio format

-Demonstrate directions and procedures/give examples

Benchmark Assessments

-AIMS Web

-Diagnostic and EOY Assessments

Formative Assessments

Check My Progress

-My Chapter Review

-Homework Practice

-Independent Practice

Summative Assessments

Chapter 8 assessment

Instructional Materials

See materials listed above.

Standards

MA.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.

MA.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.

MA.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 $\frac{1}{2}$. 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.

MA.4.NF.B.3

Understand a fraction $\frac{a}{b}$ with $a > 1$ as a sum of fractions $\frac{1}{b}$.