

Mar. Gr 4 My Math Unit 10: Fractions and decimals

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

Unit Overview

Students will learn about fractions and decimals.

Enduring Understandings

We can use place value to write decimals.

We can use models to represent decimals.

We can use place value and a number line to compare decimals.

We can use decimal notation to represent fractions.

We can add two fractions with denominators of 10 and 100.

Essential Questions

How are fractions and decimals related?

Instructional Strategies & Learning Activities

acing Guide

Suggested Pacing

Instruction 9 days

Review/Assessment 2 days

Total* 11 days

*Includes additional time for remediation and differentiation.

Lesson	Objective	Material & Manipulatives	Vocabulary	Standard
Lesson 1 <i>pp.</i> 631-636	Explore using place-value	• play money	decimal	4.NF.6

Hands On: Place Value Through Tenths and Hundredths	charts and grids to model decimals.	<ul style="list-style-type: none"> • place-value charts • tenths/hundredths grids 	tenth hundredth	4.NF.7 Major Cluster
				MP 2, 3, 4, 5, 6, 7 4.NF.6
Lesson 2 <i>pp.</i> 637-642 Tenths	Model and describe tenths as part of the base-ten system.	<ul style="list-style-type: none"> • tenths grids • place-value charts • number lines 		Major Cluster
				MP 1, 2, 4, 6, 7 4.NF.6
Lesson 3 <i>pp.</i> 643-648 Hundredths	Model and describe hundredths as part of the base-ten system.	<ul style="list-style-type: none"> • tenths/hundredths grids • place-value charts 		Major Cluster
				MP 1, 2, 4, 5, 6, 7, 8
Check My Progress				
Lesson 4 <i>pp.</i> 651-656 Hands On: Model Decimals and Fractions	Explore using grids and number lines to model the relationship between decimals and fractions.	<ul style="list-style-type: none"> • place-value charts • tenths/hundredths grids • number lines • crayons or colored pencils 		4.NF.5 4.NF.6 Major Cluster
				MP 1, 2, 3, 4, 6, 7, 8
Lesson 5 <i>pp.</i> 657-662 Decimals and Fractions	Identify, read, and write tenths and hundredths as decimals and as fractions.	<ul style="list-style-type: none"> • tenths/hundredths grids • place-value charts 		4.NF.5 4.NF.6 Major Cluster
				MP 2, 3, 4, 6, 8
Lesson 6 <i>pp.</i> 663-668 Use Place Value and Models to Add	Use place value and equivalent fractions to add two fractions with respective denominators 10 and 100.	<ul style="list-style-type: none"> • tenths/hundredths grids • fraction tiles 		4.NF.5 4.NF.6 Major Cluster
				MP 1, 2, 4, 6, 8

Lesson 7 pp. 669-674 Compare and Order Decimals	Compare and order decimals to hundredths by reasoning about their size.	<ul style="list-style-type: none"> • number lines • place-value charts • tenths/hundredths grids • crayons or markers 	4.NF.6 4.NF.7 Major Cluster
Lesson 8 pp. 675-680 Problem-Solving Investigation: Extra or Missing Information	Find extra or missing information when solving problems.		MP 1, 2, 3, 4, 7 4.NF.5 4.NF.6 Major Cluster
			MP 1, 2, 3, 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. An individual's passions, aptitude and skills can affect his/her employment and earning potential.
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

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
CS.3-5.8.1.5.DA.3	Organize and present collected data visually to communicate insights gained from different views of the data.

Interdisciplinary Connections

Leveled readers "Growing Goods in a Growing Country"

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

- Diagnostic
- Aimsweb
- End of Year Assessment

Formative Assessments

Check My Progress

-My Chapter Review

-Homework Practice

-Independent Practice

Summative Assessments

Chapter 10 Assessment

Instructional Materials

See instructional materials listed above.

Standards

MA.4.NF.C.6

Use decimal notation for fractions with denominators 10 or 100.

MA.4.NF.C.7

Compare two decimals to hundredths by reasoning about their size. Recognize that

comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual model.

MA.4.NF.C.5

Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100.