April .Gr.3 Unit 10: Fractions

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

Unit Overview

Students will understand how to model unit fractions, how to represent fractions on a number line, how to model equivalent fractions and how to compare two fractions.

Enduring Understandings

We can represent, model and compare fractions using model units and a number line.

Models help us understand equivalent fractions and how to compare fractions using < and > and =.

Essential Questions

How can fractions be used to represent numbers and their parts?

Instructional Strategies & Learning Activities

- **Pacing Guide**
  Suggested Pacing

Instruction	10 days
Review/Assessment	2 days
Total*	**12 days**

- *Includes additional time for remediation and differentiation.
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Lesson	Objective	Material & Manipulatives	Vocabulary	Standard
Lesson 1 *pp. 569-574* **Unit Fractions**	Explore and model unit fractions.	• fraction circles • fraction tiles • paper strips	**fraction** **unit fraction**	**3.NF.1, 3.G.2** **Major Cluster** **MP 2, 3, 4, 5, 6, 8**

Lesson	Objective	Materials	Vocabulary	Standards
Lesson 2 *pp. 575-580* **Part of a Whole**	Read and write fractions that name part of a whole.	• paper(square sticky notes) • fraction tiles	**numerator denominator**	**3.NF.1** **Major Cluster** **MP 2, 3, 4, 5, 7, 8**
Lesson 3 *pp. 581-586* **Part of a Set**	Use models to represent fractions that name part of a set.	• counters		**3.NF.1** **Major Cluster** **MP 1, 2, 3, 4**
Lesson 4 *pp. 587-592* **Problem-Solving Investigation: Draw a Diagram**	Draw a diagram to solve problems.	• six one-dollar bills (play money)		**3.NF.1** **Major Cluster** **MP 1, 2, 4, 6**
Check My Progress				
Lesson 5 *pp. 595-600* **Hands-On: Fractions on a Number Line**	Represent fractions on a number line.	• paper • ruler • fraction tiles		**3.NF.1, 3.NF.2, 3.NF.2a, 3.NF.2b** **Major Cluster** **MP 2, 4, 5, 6**
Lesson 6 *pp. 601-606* **Equivalent Fractions**	Use models to find equivalent fractions.	• pencils • fraction tiles • colored pencils	**equivalent fractions**	**3.NF.1, 3.NF.2, 3.NF.2a, 3.NF.2b, 3.NF.3, 3.NF.3a, 3.NF.3b** **Major Cluster** **MP 2, 3, 4, 6, 8**
Lesson 7 *pp. 607-612* **Fractions as One Whole**	Express whole numbers as fractions and recognize fractions equivalent to whole numbers.	• pattern blocks		**3.NF.1, 3.NF.2, 3.NF.2b, 3.NF.3, 3.NF.3a, 3.NF.3b, 3.NF.3c** **Major Cluster**

| Lesson 8 *pp. 613-617*
Compare Fractions | Use models to compare two
fractions and record the results. | • fraction tiles | **MP 1, 2, 3, 4,
6, 7**
3.NF.1,
3.NF.2,
3.NF.2a,
3.NF.2b,
3.NF.3,
3.NF.3d

Major
Cluster

MP 2, 3, 5, 6 |

My Review and Reflect

Integration of Career Readiness, Life Literacies and Key Skills

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.
TECH.9.4.5.CI.3	Participate in a brainstorming session with individuals with diverse perspectives to expand one's thinking about a topic of curiosity (e.g., 8.2.5.ED.2, 1.5.5.CR1a).
TECH.9.4.5.CT	Critical Thinking and Problem-solving
TECH.9.4.5.CT.1	Identify and gather relevant data that will aid in the problem-solving process (e.g., 2.1.5.EH.4, 4-ESS3-1, 6.3.5.CivicsPD.2).
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).
	Curiosity and a willingness to try new ideas (intellectual risk-taking) contributes to the development of creativity and innovation skills.
	Digital identities must be managed in order to create a positive digital footprint.
	An individual's passions, aptitude and skills can affect his/her employment and earning potential.
	Collaboration with individuals with diverse perspectives can result in new ways of thinking and/or innovative solutions.
	The ability to solve problems effectively begins with gathering data, seeking resources, and applying critical thinking skills.

Technology and Design Integration

Students will interact with Smartboard, Chromebooks and document camera.

CS.3-5.8.1.5.DA.1	Collect, organize, and display data in order to highlight relationships or support a claim.
	Computing devices may be connected to other devices to form a system as a way to extend their capabilities.
	Data can be organized, displayed, and presented to highlight relationships.

Interdisciplinary Connections

Math leveled readers, "Moon Gazing".

LA.RI.3.1	Ask and answer questions, and make relevant connections to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.
LA.RI.3.4	Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 3 topic or subject area.
LA.RI.3.7	Use information gained from text features (e.g., illustrations, maps, photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur).
LA.RI.3.10	By the end of the year, read and comprehend literary nonfiction at grade level text-complexity or above, with scaffolding as needed.

Differentiation

Each My Math unit throughout the series offers "approaching level", "on level" and "Beyond level" differentiated instructional hands-on choices, as well as ELL differentiated support. Please refer to the teacher edition for the activities.

Modifications & Accommodations

IEP and 504 accommodations will be followed.

Benchmark Assessments

Aimsweb Assessment, Chapter Pretests, Dreambox

Formative Assessments

Teacher observation

Student conferences

Discussion

Activities

games

homework

Summative Assessments
My Math chapter assessments

Instructional Materials
See materials listed above

Standards

MA.3.G.A.2	Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole.
MA.3.NF.A.1	Understand a fraction $1/b$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size $1/b$.
MA.3.NF.A.2	Understand a fraction as a number on the number line; represent fractions on a number line diagram.
MA.3.NF.A.3	Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.
MA.3.NF.A.2a	Represent a fraction $1/b$ on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts. Recognize that each part has size $1/b$ and that the endpoint of the part based at 0 locates the number $1/b$ on the number line.
MA.3.NF.A.2b	Represent a fraction a/b on a number line diagram by marking off a lengths $1/b$ from 0. Recognize that the resulting interval has size a/b and that its endpoint locates the number a/b on the number line.
MA.3.NF.A.3a	Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line.

MA.3.NF.A.3b	Recognize and generate simple equivalent fractions (e.g., 1/2 = 2/4, 4/6 = 2/3). Explain why the fractions are equivalent, e.g., by using a visual fraction model.
MA.3.NF.A.3c	Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers.
MA.3.NF.A.3d	Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model.