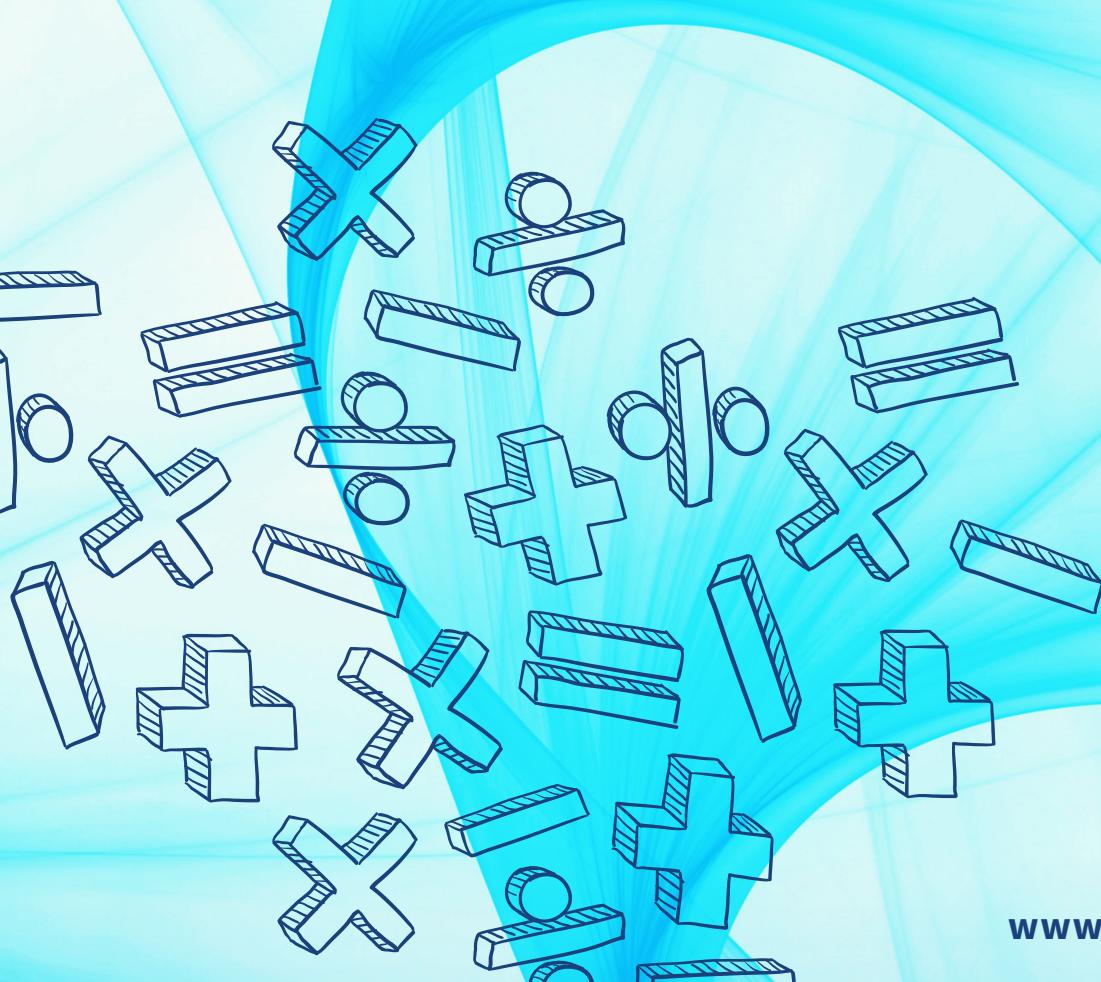# COMPARE FRACTIONS

Discover the wonder of mathematics in our everyday world with STEMscopes Math. Built from the ground up by practicing educators using the flexible 5E lesson model, STEMscopes Math provides you with everything you need to create a meaningful learning experience.

LEARNING WITHIN A REAL-WORLD, RELEVANT CONTEXT

Student learning is rooted in real-world scenarios. Real-world connection provides teachers a way to foster an understanding and appreciation for numbers by focusing on the relationship between mathematical concepts and students' experiences and interests. When real-world connection is incorporated into lessons, students can see how math fits into their daily lives.

STEMscopes Math uses the Hook, Explore Activities, and Problem-Based Tasks to engage students in real-world situations where math skill is needed. Life Connections, Career Connections, Math Today! News, and Math Story incorporate math into the everyday experiences and careers that students may encounter outside of the classroom.

DESIGNED FOR NEW AND VETERAN TEACHERS

Every STEMscopes Math lesson is built to the standards, from the ground up. Chunking information into bite-size pieces, we make our units (called "scopes") digestible and engaging. Whether you're a new or veteran teacher, STEMscopes Math provides everything you need to create a meaningful learning experience.

CONCRETE-REPRESENTATIONAL-ABSTRACT (CRA) APPROACH

The CRA model is a powerful strategy for teaching new math concepts. It is a three-part constructivist process that transitions students from hands-on learning to the math we use as adults. As students progress through the Explore Activities (Lessons), they will transition from hands-on experiences with concrete objects to representational, pictorial models and ultimately arrive at symbolic representations, using only numbers, notations, and mathematical symbols.

Since state assessments often require students to solve problems at all three levels, the CRA model helps students succeed in high-stakes testing. Research-based studies show that students who use concrete materials to learn math develop more precise and comprehensive mental representations, show more motivation and on-task behavior, understand mathematical ideas, and better apply these ideas to life situations.

CONCRETE   ABSTRACT

$2+4=6$

GOAL

REPRESENTATIONAL

PROMOTING EQUITY

Implementing STEMscopes Math in the classroom provides every student access to high-quality, challenging learning opportunities. The activities within the program are scaffolded and differentiated so that all students find the content accessible, relatable, and challenging. The emphasis on collaborative learning and intentional discourse within the STEMscopes program promotes a sense of community in the classroom where students can learn from each other.

DIGITAL, PRINT, AND KITS

We are committed to delivering flexible, differentiated, student-centered instructional content through our digital platform, and we're all about making life easier for teachers.

Our **digital platform** allows you to assign work directly to student accounts, push content to Google Classroom, print materials on demand, and use our lessons in a whole-group or blended learning setting. Find coherent, 5E-based lessons that align with standards and seamlessly flow from one activity to the next.

Print and hands-on kits bring digital learning and real-world instruction together. These supplemental resources establish a concrete connection between school and home, helping teachers make education more equitable.

STUDENT PRINT
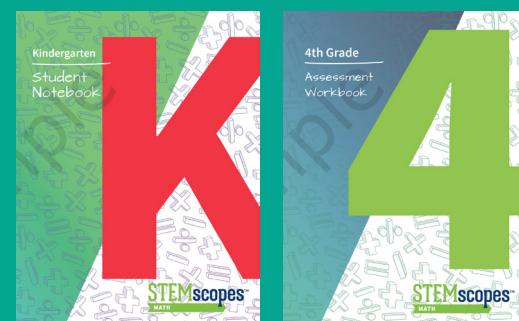
HANDS-ON KITS

STANDARDS

Aligning our math program to standards is at the core of what we do. STEMscopes Math fully supports your state standards, no matter where you are.

HOME

This is where you will find your lesson planning materials so you can facilitate fun, purposeful experiences for your students. Build your content knowledge, review the scope's standards, and access parent materials in the Home section.

ENGAGE

The Engage section lays the foundation for learning. You begin by pre-assessing students and filling knowledge gaps. The Hook lays out a storyline narrative to establish a purpose for learning and capture students' attention with real-world connections.

EXPLORE*

This is where students dig into the content. The Explore section includes scaffolded hands-on activities that build toward mastery of the standards. Each Explore prompt encourages rich mathematical discourse and student reasoning, and concludes with an Exit Ticket.

EXPLAIN*

Paired with Explore, the Explain section offers a variety of resources that connect the experiences of the Explore activities to the academic content students need to know. These resources include illustrated vocabulary cards, independent practice, and journal prompts that support the Explore activities and solidify student learning.

ELABORATE*

Workstations are a go! The Elaborate section makes differentiation a cinch with ready-made activities—digital and paper-based games, spiraled review, career connections, literacy connections, and more—perfect for rotations! Students continue learning while you make time for small group interventions and independent projects to support your struggling and advanced learners.

*Instructional elements in STEMscopes Mathematics are intended to work together. The elements in the Explain and Elaborate sections can be used to support student learning and provide opportunities for practice while students explore the concept.

EVALUATE

Get the data you need from the assessment tools provided in the Evaluate section. From multiple choice-based assessments to an open-ended reasoning prompt, there's an evaluation for every student's learning style. You can also create your own assessments using the assessment builder tool.

INTERVENTION

Useful during Elaborate or as an after-school support, Intervention is a small hands-on activity designed to target students' conceptual misunderstanding while building their math skills. This is also a great re-teach and test prep tool!

ACCELERATION

Are your students ready to go above and beyond with what they've learned? In the Acceleration section, students complete a design challenge and relate learning to current events around the world. The activities prompt them to think more deeply about the content and its applications.

Third Grade
SAMPLE LESSON

SCOPE (UNIT)   **Compare Fractions**
EXPLORE (LESSON)   **Compare Fraction Wholes**

The following pages introduce resources to help you get the most out of your STEMscopes Math Grade 3 lesson. You will also notice we've provided supportive unit resources that would allow you to plan lessons throughout the year using STEMscopes Math.

This sample lesson **does not include** all the elements and features of our digital and print math curriculum.

RESOURCE LIST

The following resources, as well as additional resources not listed, can be found in the digital curriculum *Grade 3 Scope, Compare Fractions.*

HOME

- Student Expectations
- Key Concepts
- Scope Overview
- Parent Letter

TEACHER TOOLBOX

- Scope List
- Scope and Sequence
- Lesson Planning Guide for 1-3 Explores
- Lesson Planning Guide for 3-5 Explores

EXPLORE

- Explore 1: Compare Fraction Wholes*

ELABORATE

- "Mark the Spot" Fluency Builder*

EXPLAIN

- Vocabulary Cards*

DAILY NUMERACY

- "Not Like the Others" Activity*

FACT FLUENCY

- "Sixes" Mini-Lesson*

These activities are samples and do not represent all the activities and resources within our digital and print curriculum.

Third Grade SAMPLE LESSON

SCOPE (UNIT) **Compare Fractions**
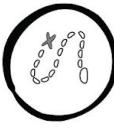

STUDENT EXPECTATIONS

Develop an understanding of fractions as numbers.

- Explain the equivalence of fractions in special cases, and compare fractions by reasoning about their size.

- 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.

KEY CONCEPTS

- I can recognize that comparisons are only valid if the wholes are the same size.

- I can compare fractions by looking at the number of parts within the whole and the size of these parts.

- I can compare fractions that have the same denominator and different numerators.

- I can compare fractions that have the same numerator and different denominators.

- I can record the results of comparisons using >, <, and =.

- I can justify the conclusions of a comparison using visual fraction models.

Scope Overview: Compare Fractions

Standards

Develop understanding of fractions as numbers.

- Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.

  d. 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 conclusions, e.g., by using a visual fraction model.

Home

- Scope Overview
- Content Support
- Standards Unwrapped

Engage

- Accessing Prior Knowledge: Happy Birthday!
- Foundation Builder: Which is Greater?
- Hook: It's a Piece of Cake

If the APK reveals that students are not ready, move to the Foundation Builder!

Explore

- Explore 1: Compare Fraction Wholes
  - Exit Ticket
- Explore 2: Compare Fractions with Like Numerators
  - Exit Ticket
- Explore 3: Compare Fractions with Like Denominators
  - Exit Ticket
- Explore 4: Compare Fractions with Same Numerator or Denominator
  - Exit Ticket
- Show What You Know: Part I
- Show What You Know: Part II
- Show What You Know: Part III
- Show What You Know: Part IV

Explain

- Picture Vocabulary
- Show What You Know
- My Math Thoughts
- Anchor Chart
- Interactive Notebook

Elaborate

- Fluency Builder
  - Greater Than Less Than
  - Mark the Spot
- Spiraled Review
  - The Cooking Competition
- Math Story: Valentine's Day Report
- Problem-Based Task: A Sweet Tooth
- Interactive Practice: Paintball Challenge
- Career Connections: Joe Torre
- PhET - Fraction: Equality

Once all of the Explores have been taught, go back to the Hook for students to apply knowledge learned.

Evaluate

- Decide and Defend: Backstroke Technique
- Multiple Choice Assessment
- Skills Quiz

Intervention

- Small-Group Intervention
- Checkup

Acceleration

- Math Today; Pizza Party!
- Create Your Own: Play

Instructional elements in STEMscopes Mathematics are intended to work together. The elements in the Explain and Elaborate sections can be used to support student learning and provide opportunities to practice while the students are exploring the concept.

Third Grade – Compare Fractions

Dear Parents,

Your child is about to explore comparing fractions. To master this skill, your child will build on his or her knowledge of partitioning from second grade. In second grade, your child learned to partition using halves, fourths, and thirds. As your child extends his or her knowledge of this concept throughout third grade, he or she will learn the following concepts:

- Use reasoning skills to be able to compare two fractions, referring to the same whole, with the same numerator or the same denominator according to their size. Understand that the larger the denominator, the smaller the unit size.
  - Comparing fractions with the same numerator

Example: Mark ate $\frac{3}{8}$ of a pizza. Henry ate $\frac{3}{6}$ of a pizza.

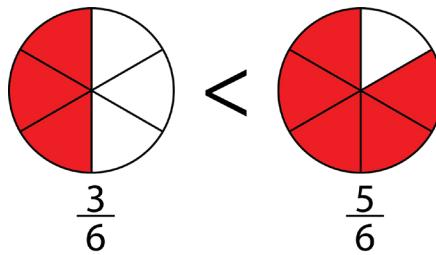Write a comparison statement for the pizzas eaten by Mark and Henry.

$$\frac{3}{8} < \frac{3}{6}$$

$\frac{3}{6}$ is greater than

$\frac{3}{8}$
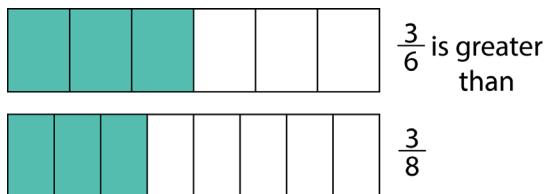
  - Comparing fractions with the same denominator

Example: Noah ran $\frac{3}{6}$ of a mile on Monday and $\frac{5}{6}$ of a mile on Friday.

Write a comparison statement for the miles Noah ran.

$$\frac{3}{6} < \frac{5}{6}$$

While working with your child at home, the following vocabulary terms might be helpful in your communication about comparing fractions. These are terms your child will be encouraged to use throughout our explorations and during our math chats, which are short, whole-group discussions at the conclusion of each activity.
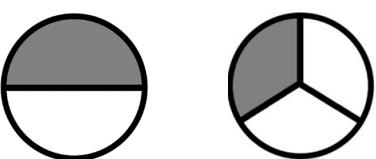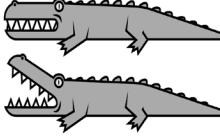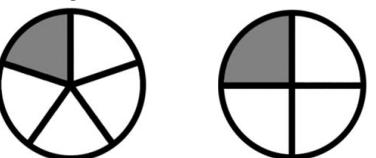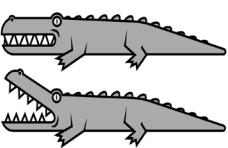
- **Terms to Know**
  - **area model:** a model where the length and width represent the factors and are configured through the operation of multiplication
  - **benchmark fractions:** familiar fractions used as reference points in order to measure, compare, and assess the reasonableness of a fractional value
  - **compare:** to examine the difference between the values of numbers to see if one is > (greater than), < (less than), or = (equal to) another number
  - **denominator:** the bottom number within a fraction; represents the whole
  - **equivalent fractions:** two or more fractions that are equal
  - **numerator:** the top number within a fraction; represents the part of the whole
  - **unit fraction:** a fraction in which the numerator is 1 and the denominator is a positive integer

We will do many explorations in class to help your child learn these concepts from firsthand experiences. Encourage your child to share these experiences with you and to teach you what he or she has learned. Ask your child to identify examples of what he or she is learning in everyday life, such as fractions seen in cakes or pizza.

Thank you for your support as your child begins this new learning adventure.

Sincerely,

Tic-Tac-Toe: Try This at Home

Compare Fractions **>** means bigger than **<** means smaller than Draw the correct symbol between the two fractions to compare them. $\frac{1}{2}$ $\frac{1}{3}$	**Bigger Denominators Mean Smaller Pieces** The greater number of parts that a whole is divided into, the smaller each fraction is. The fewer number of parts a whole is divided into, the larger the size of the fraction. Would you rather have a piece of pizza cut into sixths or cut into fourths? Why?	**Big Bite** The alligator wants to eat the bigger value. Place the pairs of fractions on the correct side of the alligator. $\frac{3}{4}$ and $\frac{2}{4}$, $\frac{1}{5}$ and $\frac{4}{5}$
Compare Fractions **>** means bigger than **<** means smaller than Draw the correct symbol between the two fractions to compare them. $\frac{1}{5}$ $\frac{1}{4}$	**Free Space**	**Comparing Fractions with Equal Numerators** Fractions with the same numerator but different denominators can be compared by looking at the denominator. Remember the pizza portion rule: the more the pizza is divided, the smaller the piece of pizza. Write the greater than or less than signs to compare the following fractions: $\frac{3}{8}$ $\frac{3}{5}$
Hungry Alligator The alligator is still hungry and wants to eat the bigger value. Place the pairs of fractions on the correct side of the alligator. $\frac{5}{6}$ and $\frac{4}{6}$, $\frac{1}{8}$ and $\frac{4}{8}$	**Fraction of Work Done** Raul finished $\frac{3}{8}$ of his chores. However, his sister Alma finished $\frac{3}{6}$ her chores. Who completed more chores? How did you figure that out?	**Comparing Fraction Models** Write the appropriate comparison symbol (<, >, or =) between the following two models. Write the correct fraction that is shaded below each.
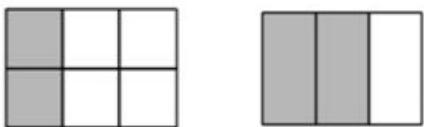
Third Grade Scope List

Scope Name	Explores	Suggested Pacing
Addition and Subtraction Fluency	4 Explores	1-2 Weeks
Rounding	2 Explores	1 Week
Multiplication Models	4 Explores	2 Weeks
Division Models	4 Explores	2 Weeks
Multiplication and Division Strategies	4 Explores	2 Weeks
Multiply by Multiples of 10	3 Explores	1-2 Weeks
Arithmetic Patterns	2 Explores	1 Week
Multiplication and Division Problem Solving	3 Explores	1-2 Weeks
Problem Solve Using the Four Operations	3 Explores	2 Weeks
Area in Square Units	2 Explores	2 Weeks
Apply the Area Formula	4 Explores	
Perimeter	4 Explores	1-2 Weeks
Geometry	3 Explores	1-2 Weeks
Fractions on a Number Line	2 Explores	1 Week
Compose and Decompose Fractions into Units	3 Explores	1 Week
Equivalent Fractions	3 Explores	1-2 Weeks
Compare Fractions	4 Explores	1-2 Weeks
Time	2 Explores	1 Week
Volume and Mass	4 Explores	1-2 Weeks
Represent and Interpret Data	2 Explores	1-2 Weeks

STEMscopes Math Suggested Scope and Sequence

The STEMscopes Math program is flexible, and there are variations in implementation within the guidelines provided here. This Scope and Sequence is meant to serve as a tool for you to lean on as you find how STEMscopes Math best meets the needs of the students in your classroom.

THIRD GRADE

Week	Scope	Clusters
1	• Establish classroom procedures. • **Pre-Assessment Benchmark**	Major
2	• Addition and Subtraction Fluency	Additional
3	• Addition and Subtraction Fluency	Additional
4	• Rounding	Additional
5	• Multiplication Models	Major
6	• Multiplication Models	Major
7	• Division Models	Major
8	• Division Models	Major
9	• Multiplication and Division Strategies	Major
10	• Multiplication and Division Strategies	Major
11	• Multiply by Multiples of 10	Additional
12	• Arithmetic Patterns	Major
13	• Multiplication and Division Problem Solving	Major
14	• Problem Solve Using the Four Operations	Major
15	• Area in Square Units	Major
16	• Apply the Area Formula	Major
17	• Perimeter	Additional
18	• Perimeter • **Mid-Assessment Benchmark**	Additional
19	• Geometry	Supporting
20	• Geometry	Supporting
21	• Fractions on a Number Line	Major
22	• Compose and Decompose Fractions into Units	Major

Week	Scope	Clusters
23	• Compose and Decompose Fractions into Units	Major
24	• Equivalent Fractions	Major
25	• Equivalent Fractions	Major
26	• Compare Fractions	Major
27	• Compare Fractions	Major
28	• Time	Major
29	• Volume and Mass	Major
30	• Volume and Mass	Major
31	• Represent and Interpret Data	Supporting
32	• Represent and Interpret Data • **Post-Assessment Benchmark**	Supporting
33	• **Review Week**	Major
34	• **STANDARDIZED TEST (Approximate)**	Major
35	Review: • Addition and Subtraction Fluency • Multiplication Models • Division Models • Multiplication and Division Strategies • Multiplication and Division Problem Solving	Major
36	Review: • Apply the Area Formula • Perimeter • Geometry • Equivalent Fractions • Compare Fractions • Represent and Interpret Data	Major

Week	Daily Numeracy
All	Additional or repeated standards are addressed in Daily Numeracy. These activities should be rotated through daily. To see the full list of what standards are addressed in these activities, please see the Daily Numeracy: Standards by Activity section in the Daily Numeracy Teacher Toolbox.

Whole–Group Plan (3rd–5th Grade)

1 – 3 Explores

*Based on 90-minute class period	Day 1	Day 2	Day 3	Day 4	Day 5

Whole Group	Fact Fluency/Daily Numeracy
	
	Accessing Prior Knowledge
	
	Foundation Builder[1]
	
	Hook (Pre-Explore)
	
	Begin Explores if time allows.
	
	Anchor Chart
		Fact Fluency/Daily Numeracy
		
		Explores[2]
		
		Anchor Chart
		
		Exit Ticket
		
		Show What You Know
		(Assist and reteach as needed.)
			Fact Fluency/Daily Numeracy
			
			Explores (continued)
			
			Anchor Chart
			
			Exit Ticket
			
			Show What You Know
			(Assist and reteach as needed.)
				Fact Fluency/Daily Numeracy
				
				Hook (Post-Explore)
				
				Interactive Notebook
				
				Teacher Choice[3]
				
				All students:
				  • Picture Vocabulary
				  • My Math Thoughts
				  • Career Connection
				
				Mastery Level:
				  • Decide and Defend
				  • Math Today
				  • Create Your Own
				
				Meets Level:
				  • Math Story
				  • Problem-Based Task
				
				Approaching Level:
				  • Interactive Practice
				  • Skills Quiz
					Fact Fluency/Daily Numeracy
					
					Small Group Intervention (for students who need it)
					
					Fluency Builder (Choose one.)
					(For students who don't need intervention)

Assessment and Closure	Accessing prior knowledge to determine readiness Formative assessment based on APK and student performance on Explore Allow students to share what they felt successful with and what they struggled with today.	Administer the Exit Ticket to assess student learning after the Explore. Allow students to work on Show What You Know as independent practice after the Explore.	Administer the Exit Ticket to assess student learning after the Explore. Allow students to work on Show What You Know as independent practice after the Explore.	Assess how students perform based on individual assignment chosen.	Standards-Based Assessment

The essential elements are highlighted. If time is limited, teach these elements to fully cover the standards.
[1]Use as intervention if APK shows foundational gaps.
[2]Set your pace according to the number of Explores included in this scope. Use Exit Tickets as well as Show What You Knows for each Explore completed.
[3]Teachers can choose from the following elements. We have suggested activities for students including recommended tasks for students at each skill level.

STEMscopes™ MATH

Small-Group Plan (3rd–5th Grade)

1 – 3 Explores

*Based on 90-minute class period	Day 1	Day 2	Day 3	Day 4	Day 5
Whole Group *20 Minutes	Daily Numeracy Accessing Prior Knowledge[1] Hook (Pre-Explore) Introduce stations.	Daily Numeracy Allow students to share what they learned yesterday and discuss what students worked on. Anchor Chart	Daily Numeracy Allow students to share what they learned yesterday and discuss what students worked on. Anchor Chart Add Picture Vocabulary words to word wall based on terms introduced in the lessons.	Daily Numeracy Hook (Post-Explore) Review any Explore or Show What You Know problems that gave students trouble. Anchor Chart Interactive Notebook	Daily Numeracy Spiraled Review Standards-Based Assessment
Small Group Instruction *Small group/ Stations 70 Minutes	Pull small groups of students to do: 1. The Foundation Builder (if they need previous grade level content) 2. Explore 1	Pull students to work with you to finish Explores 1 – 2	Pull students to work with you on Explores 2 – 3	Pull students to do the Small Group Intervention based on needs.	None
Stations *Options are flexible.	1. Fact Fluency 2. Interactive Practice 3. Fluency Builder 4. Career Connection 5. Spiraled Review 6. Show What You Know	1. Fact Fluency 2. Interactive Practice 3. Fluency Builder 4. My Math Thoughts 5. Spiraled Review 6. Show What You Know	1. Fact Fluency 2. Interactive Practice 3. Fluency Builder 4. Math Story 5. Spiraled Review 6. Show What You Know	Have students work in groups on the Problem-Based Task.	1. Fact Fluency 2. Decide and Defend 3. Skills Quiz 4. Create Your Own 5. Math Today 6. Spiraled Review
Assessment and Closure	Accessing prior knowledge to determine readiness Formative assessment based on APK and student performance to determine who needs to be pulled to small group Allow students to share what they felt successful with and what they struggled with today.	Administer the Exit Ticket to assess student learning after the Explore. Allow students to work on Show What You Know as independent practice after the Explore.	Administer the Exit Ticket to assess student learning after the Explore. Allow students to work on Show What You Know as independent practice after the Explore.	Student success with intervention can be assessed using the Checkup. Other students can be assessed by their performance on the Problem-Based Task.	Standards-Based Assessment

The essential elements are highlighted. If time is limited, teach these elements to fully cover the standards.

[1]Use as intervention if APK shows foundational gaps.

[2]Set your pace according to the number of Explores included in this scope. Use Exit Tickets as well as Show What You Knows for each Explore completed.

STEMscopes™ MATH

Whole–Group Plan (3rd–5th Grade)

3 – 5 Explores

STEMscopes™ MATH

Week 1 *Based on 90-minute class period	Day 1	Day 2	Day 3	Day 4	Day 5
Whole Group	Fact Fluency/Daily Numeracy Accessing Prior Knowledge Foundation Builder[1] Hook (Pre-Explore)	Fact Fluency/Daily Numeracy Explores[2] Anchor Chart Exit Ticket Show What You Know (Assist and reteach as needed.)	Fact Fluency/Daily Numeracy Explores (continued) Anchor Chart Exit Ticket Show What You Know (Assist and reteach as needed.)	Fact Fluency/Daily Numeracy Explores (continued) Anchor Chart Exit Ticket Show What You Know (Assist and reteach as needed.)	Fact Fluency/Daily Numeracy Explores (continued) Anchor Chart Exit Ticket Show What You Know (Assist and reteach as needed.)
Assessment and Closure	Accessing prior knowledge to determine readiness Formative assessment based on APK and student performance on Explore Allow students to share what they felt successful with and what they struggled with today.	Administer the Exit Ticket to assess student learning after the Explore. Allow students to work on Show What You Know as independent practice after the Explore.	Administer the Exit Ticket to assess student learning after the Explore. Allow students to work on Show What You Know as independent practice after the Explore.	Administer the Exit Ticket to assess student learning after the Explore. Allow students to work on Show What You Know as independent practice after the Explore.	Administer the Exit Ticket to assess student learning after the Explore. Allow students to work on Show What You Know as independent practice after the Explore.

The essential elements are highlighted. If time is limited, teach these elements to fully cover the standards.

[1]Use as intervention if APK shows foundational gaps.

[2]Set your pace according to the number of Explores included in this scope. Use Exit Tickets as well as Show What You Knows for each Explore completed.

Whole–Group Plan (3rd–5th Grade)

3 – 5 Explores

Week 2 *Based on 90-minute class period	Day 6	Day 7	Day 8	Day 9	Day 10
Whole Group	Fact Fluency/Daily Numeracy Explores (continued) Anchor Chart Exit Ticket Show What You Know (Assist and reteach as needed.)	Fact Fluency/Daily Numeracy Hook (Post-Explore) Picture Vocabulary My Math Thoughts Math Today Career Connection	Fact Fluency/Daily Numeracy Interactive Notebook Math Story Problem-Based Task	Fact Fluency/Daily Numeracy Teacher Choice³ Meets Level: • Decide and Defend • Create Your Own Approaching Level: • Interactive Practice • Skills Quiz	Fact Fluency/Daily Numeracy Small Group Intervention (for students who need it) Fluency Builder (Choose one.) (For students who do not need intervention)
Assessment and Closure	Administer the Exit Ticket to assess student learning after the Explore. Allow students to work on Show What You Know as independent practice after the Explore.	Allow students to share what they felt successful with and what they struggled with today.	Assess how students perform on the Problem-Based Task.	Assess how students perform based on individual assessment chosen.	Standards-Based Assessment

The essential elements are highlighted. If time is limited, teach these elements to fully cover the standards.
³Choose from the following elements. We have suggested activities for students including recommended tasks for students at each skill level.

STEMscopes™ MATH

Small-Group Plan (3rd–5th Grade)

3 – 5 Explores

Week 1 *Based on 90-minute class period	Day 1	Day 2	Day 3	Day 4	Day 5
Whole Group *20 Minutes	Daily Numeracy Accessing Prior Knowledge[1] Hook (Pre-Explore) Introduce stations.	Daily Numeracy Allow students to share what they learned yesterday and discuss what students worked on.	Daily Numeracy Allow students to share what they learned yesterday and discuss what students worked on. Anchor Chart Add Picture Vocabulary words to word wall based on terms introduced in the lessons.	Daily Numeracy Allow students to share what they learned yesterday and discuss what students worked on. Anchor Chart Review any Explore or Show What You Know problems that gave students trouble.	Daily Numeracy Allow students to share what they learned yesterday and discuss what students worked on. Anchor Chart Review any Explore or Show What You Know problems that gave students trouble.
Small Group Instruction *Small group/ Stations 70 Minutes	Pull small groups of students to do the Foundation Builder (if they need previous grade-level content). Begin Explores	Pull students to work with you on Explore 1.	Pull students to work with you on Explore 2.	Pull students to work with you on Explore 3.	None
Stations	1. Fact Fluency 2. Interactive Practice 3. Fluency Builder (from previous scope)	1. Fact Fluency 2. Interactive Practice 3. Fluency Builder (from previous scope)	1. Fact Fluency 2. Interactive Practice 3. Fluency Builder (from previous scope)	1. Fact Fluency 2. Interactive Practice 3. Fluency Builder (from previous scope)	1. Fact Fluency 2. Interactive Practice 3. Fluency Builder (from previous scope)
Assessment and Closure	Accessing prior knowledge to determine readiness Formative assessment based on APK and student performance to determine who needs to be pulled to small group Allow students to share what they felt successful with and what they struggled with today.	Administer the Exit Ticket to assess student learning after the Explore. Allow students to work on Show What You Know as independent practice after the Explore.	Administer the Exit Ticket to assess student learning after the Explore. Allow students to work on Show What You Know as independent practice after the Explore.	Administer the Exit Ticket to assess student learning after the Explore. Allow students to work on Show What You Know as independent practice after the Explore.	Administer the Exit Ticket to assess student learning after the Explore. Allow students to work on Show What You Know as independent practice after the Explore.

The essential elements are highlighted. If time is limited, teach these elements to fully cover the standards.

[1] Use as intervention if APK shows foundational gaps.

[2] Set your pace according to the number of Explores included in this scope. Use Exit Tickets as well as Show What You Knows for each Explore completed.

STEMscopes™ MATH

Small-Group Plan (3rd–5th Grade)

3 – 5 Explores

Week 2 *Based on 90-minute class period	Day 6	Day 7	Day 8	Day 9	Day 10
Whole Group *20 Minutes	Daily Numeracy Allow students to share what they learned yesterday and discuss what students worked on. Anchor Chart Review any Explore or Show What You Know problems that gave students trouble.	Daily Numeracy Allow students to share what they learned yesterday and discuss what students worked on. Anchor Chart Review any Explore or Show What You Know problems that gave students trouble.	Daily Numeracy Allow students to share what they learned yesterday and discuss what students worked on. Add Picture Vocabulary words to word wall based on terms introduced in the lessons.	Daily Numeracy Allow students to share what they learned yesterday and discuss what students worked on. Review any Explore or Show What You Know problems that gave students trouble.	Daily Numeracy Spiraled Review Standards-Based Assessment
Small Group Instruction	Pull students to work with you on Explore 4.	Pull students to work with you on Explore 5.	Hook (Post-Explore) Interactive Notebook	Small Group Intervention	None
*Small group/ Stations 70 Minutes **Stations**	1. Career Connection 2. Spiraled Review 3. Show What You Know	1. My Math Thoughts 2. Spiraled Review 3. Show What You Know	1. Math Story 2. Spiraled Review 3. Show What You Know	1. Problem-Based Task 2. Skills Quiz	1. Create Your Own 2. Math Today 3. Decide and Defend
Assessment and Closure	Administer the Exit Ticket to assess student learning after the Explore. Allow students to work on Show What You Know as independent practice after the Explore.	Administer the Exit Ticket to assess student learning after the Explore. Allow students to work on Show What You Know as independent practice after the Explore.	Administer the Exit Tickets to assess student learning.	Student success with intervention can be assessed using the Checkup. Other students can be assessed by their performance on the Problem-Based Task.	Standards-Based Assessment

The essential elements are highlighted. If time is limited, teach these elements to fully cover the standards.

¹Use as intervention if APK shows foundational gaps.

²Set your pace according to the number of Explores included in this scope. Use Exit Tickets as well as Show What You Knows for each Explore completed.

STEMscopes™ MATH

Addition and Subtraction Problem Solving

SAMPLE

Explore 1 - Represent and Solve All Problem Types Involving Two Whole Numbers

Prior to completing this Explore, have students complete **Skill Basics - Ways to Represent Addition and Subtraction** and **Skill Basics - Problem-Solving Model** so they can apply the skill to this concept.

Description

Students represent and solve addition and subtraction problems involving two whole numbers using models and number sentences.

Standards for Mathematical Practice

- **MP.1 Make sense of problems and persevere in solving them:** Students explain the meaning of a problem and look for ways to solve it. Students check their thinking by asking if the answer makes sense, and if not, they try other approaches.
- **MP.6 Attend to precision:** Students develop their communication skills by effectively explaining the reasoning and strategies used to solve problems.

Materials

Printed

1 Student Journal (per student)

1 Exit Ticket (per student)

1 Compare Task Card (per class)

1 Set of Taco Task Cards (per class)

1 Set of Station Cutouts (per class)

Reusable

1 Projector (optional, per class)

Preparation

- Make a copy of the Student Journal and the Exit Ticket for each student.
- Plan to project the Compare Task Card to the class or print one copy for each group to view.
- Print a set of Taco Task Cards, cut them out, and place them around the room, creating six stations.
- Print a set of the Station Cutouts on card stock (Optionally, laminate the cutouts for reuse).
  - Cut out each ingredient as accurately as possible for accurate measuring, and place each ingredient at its appropriate station.

- For students who need more support in recalling information, please see our Assorted Number Lines, Fraction Circles and Fraction Strips Supplemental Aids elements in the Intervention section.

Procedure and Facilitation Points

1. Display the Compare Task Card on a large-screen device. Read the following scenario to the class:
   The new restaurant Taco Hacienda is bringing you in to show you how they make their tacos. They have received complaints from their customers and have asked you to help them figure out why. Customers are complaining that their serving sizes are not fair. Why do you think customers are complaining?

2. Invite students to discuss the tacos with their shoulder partner.

3. Encourage students to share their discussions with the class.

   a. **DOK-2** What did you notice about the tacos? The tacos looked the same, but they were not the same size.

   b. **DOK-2** What might be the reason for the customers' complaints? The tacos are not the same size. Some people are getting bigger tacos than others.

   c. **DOK-2** You plan to share a taco equally with your friend and you are REALLY hungry. Which taco would you rather have half of? Explain. I would rather have half of the bigger taco. Half of a bigger taco will be a bigger half than a half from the smaller taco.

4. At this time, pass out a copy of the Student Journal to each student.

5. Divide the class into 6 groups and assign each group to a station. Explain that each station has one taco ingredient that needs to be evaluated. It is the students' job to determine if the ingredients are being fairly distributed to each customer's taco. Students will need to draw the portions and explain their reasoning for whether the portions are fair or not on the Student Journal.

6. Actively monitor each station while listening to discussions for misconceptions.

   a. For students struggling to discover whether or not the wholes are the same size, encourage them to physically compare the ingredients at each station by placing one on top of the other.

7. Have the groups rotate after giving them an appropriate amount of time at each station.

8. After the Explore activity, have students complete the reflection questions and invite the class to a Math Chat to share their observations and learning.

Math Chat	
Questions	**Sample Student Response**
DOK-2 How did you determine if each taco got the same amount of ingredients?	I compared the size of the whole ingredients to see if they were the same.
DOK-3 Why does the size of the whole ingredient matter when comparing fractional parts?	If the two wholes are not the same, then the fractional parts will not be the same, even if the fraction is the same. I may take half of two blocks of cheese, but those halves will not be the same size if the two blocks are different sizes.
DOK-3 What would you report to the restaurant owners about why their customers are complaining?	I would tell them that they need to be careful about the size of their whole ingredients. Giving people a fractional part of an ingredient is only fair if the whole ingredients are the same size.

9. When students are done, have them complete the Exit Ticket to assess their understanding of the concept.

Instructional Supports

1. If a student is struggling to record a pictorial representation of a fraction or the drawing is illegible, have the student verbally explain the model and his or her thinking.

2. Students may struggle to understand the idea of fractions being incomparable if their wholes are unequal size. To demonstrate this concept, partition two sheets of paper (same shape, different sizes) equally. For example, partition pieces of paper into fourths. Cut out 3 of the 4 parts to show 3/4. Though they are both three-fourths, they do NOT represent equivalent fractions because they do not cover the same area.

3. Students with impaired fine motor skills might find it challenging to cut out the pieces accurately. To ensure this is done precisely, it might be necessary to pre-cut these for students prior to starting the activity, or having a buddy to help.

Language Acquisition Strategy

The following Language Acquisition Strategy is supported in this Explore activity. See below for ways to support a student's English language development.

Students utilize personal backgrounds to comprehend English meanings.

- Ask students to describe a time that they shared a meal or dessert with a family member or friend(s). How did they decide to split it up? How did they determine how many pieces there should be? Were the pieces equal?

- Refer to the terms greater than and less than, which students learned in previous lessons (for example, "was the denominator greater than, equal to, or less than the number of people the dish was shared between?").

(bulb icon) Explore

Name: _____ Date: _____

Taco Time

Layers of Onion

Draw a model of each onion and shade each customer's portion.

What fraction of the onion did each customer receive? _____ Did both tacos get the same amount of onion? _____

Explain your reasoning.

_____

_____

Beeftastic

Draw a model of each beefsteak and shade each customer's portion.

What fraction of the steak did each customer receive? _____ Did both tacos get the same amount of steak? _____

Explain your reasoning.

_____

_____

Explore

Lettuce Heads

Draw a model of each lettuce head and shade each customer's portion.

What fraction of the lettuce did each customer receive? _____ Did both tacos get the same amount of lettuce? _____

Explain your reasoning.

_____

_____

Feelin' Cheesy

Draw a model of each cheese cube and shade each customer's portion.

What fraction of the cheese did each customer receive? _____ Did both tacos get the same amount of cheese? _____

Explain your reasoning.

_____

_____

Explore

Ta-may-toe/Ta-mah-toe

Draw a model of each tomato and shade each customer's portion.

What fraction of the tomato did each customer receive? _____ Did both tacos get the same amount of tomato? _____

Explain your reasoning.

_____

_____

Make It Spicy!

Draw a model of each jalapeño and shade each customer's portion.

What fraction of the jalapeño did each customer receive? _____ Did both tacos get the same amount of jalapeño? _____

Explain your reasoning.

_____

_____

Explore

Name: _____ Date: _____
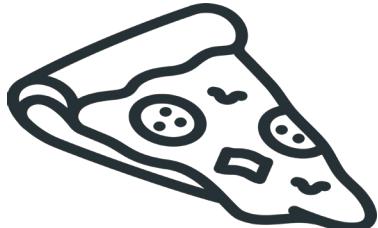
Pizza Party
Exit Ticket

Je'Shawn, Rylee, and Gabriel each ordered a pizza. They were each going to share it with 5 other people. Je'Shawn ordered a small pizza and cut it into 6 equal slices. Rylee ordered a medium pizza and cut it into 6 equal slices. Gabriel ordered a large pizza and cut it into 6 equal slices.

Draw the 3 different pizzas with each one divided into 6 equal slices.

What is the fraction of one slice of pizza for each friend? _____

Are the pizza slices for each friend the same? Justify your reasoning.

_____

_____

_____

What changes would need to be made in order to compare the pizza slices fairly?

_____

_____

_____

1

Explore

Taco Hacienda

The restaurant has received complaints about the size of their tacos. Customers are complaining that their servings are not fair. Why do you think customers are complaining?
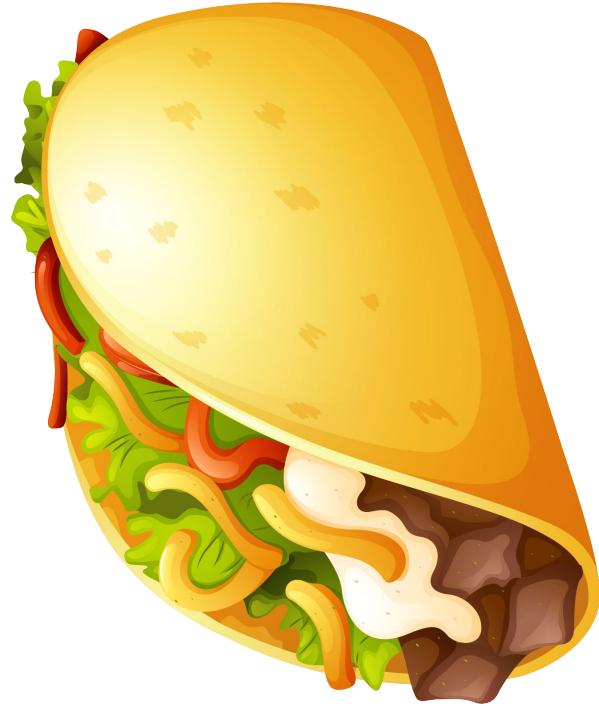
Customer B's Taco

Customer A's Taco

Explore

Layers of Onion

Two customers order chicken tacos with onion. Both customers asked for $\frac{1}{4}$ of an onion on their taco. Look at Customer A's and Customer B's onion. Did they receive the same amount?

Beeftastic

For beef fajita tacos, the restaurant cuts the beef into pieces. They use $\frac{3}{8}$ of a beefsteak for each taco. Look at Customer A's and Customer B's beef steaks. Did they receive the same amount?

Explore

Lettuce Heads

The restaurant adds lettuce to each of their tacos. Each taco gets $\frac{2}{6}$ of a head of lettuce. Look at Customer A's and B's lettuce portions. Did they receive the same amount?

Feelin' Cheesy

Two customers order shredded cheese for their tacos. Each taco gets $\frac{1}{2}$ of a cheese cube shredded onto the taco. Look at Customer A's and Customer B's cheese portions. Did they receive the same amount?

Explore

To-may-toe/To-mah-toe

Two customers order shredded beef tacos with tomato. Each customer asked for $\frac{2}{3}$ of a tomato on their taco. Look at Customer A's and Customer B's tomato portions. Did they receive the same amount?

Make It Spicy!

On the spicy chicken fajita taco, they add $\frac{1}{2}$ of a jalapeño, diced. Look at Customer A's and Customer B's jalapeño portions. Did they receive the same amount?
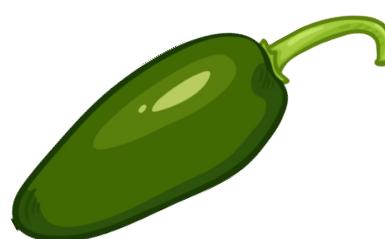
⊙ Explore

Onion Cutouts
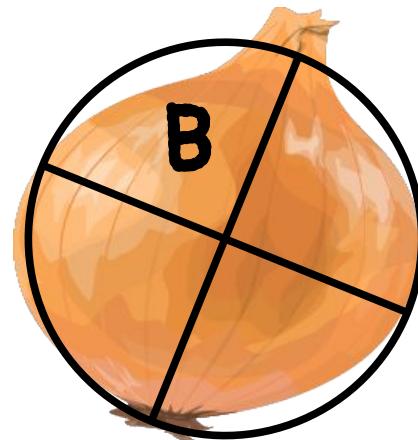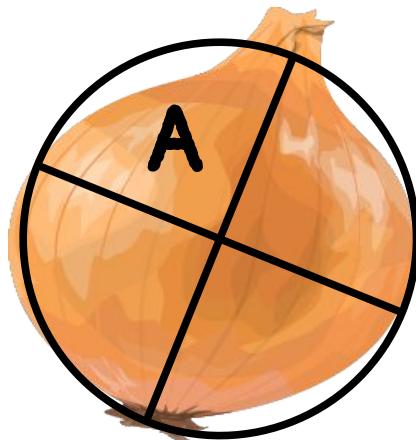
Lettuce Cutouts
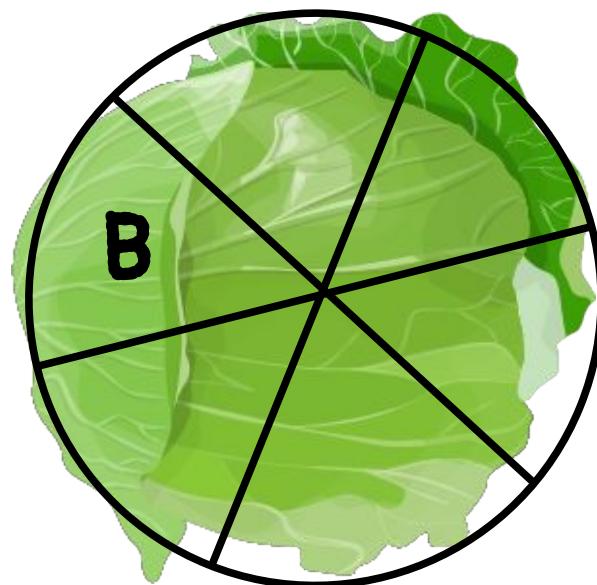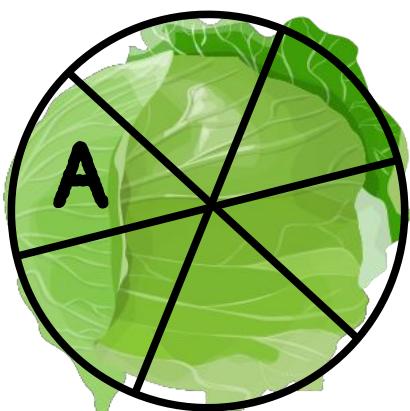
Explore

Tomato Cutouts
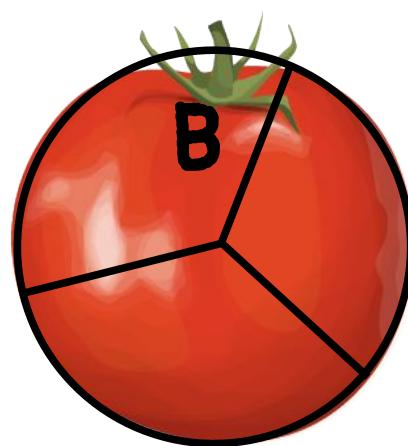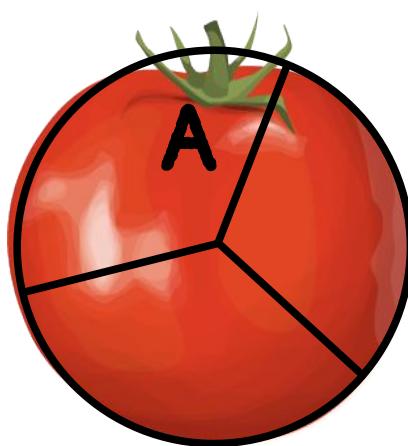
Cheese Cutouts
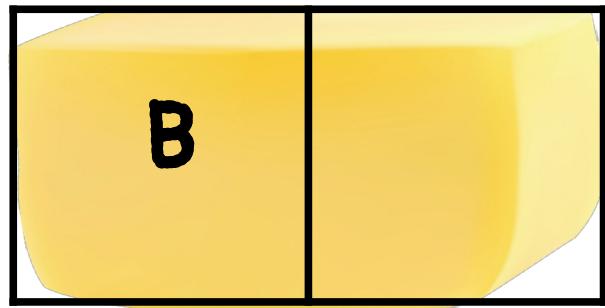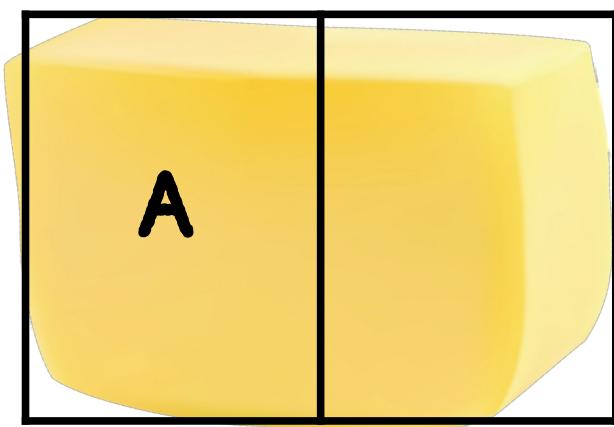
Explore

Jalapeño Cutouts
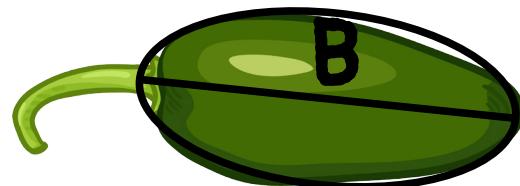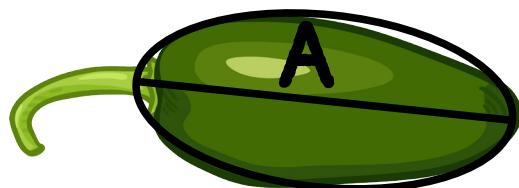
Beefsteak Cutouts
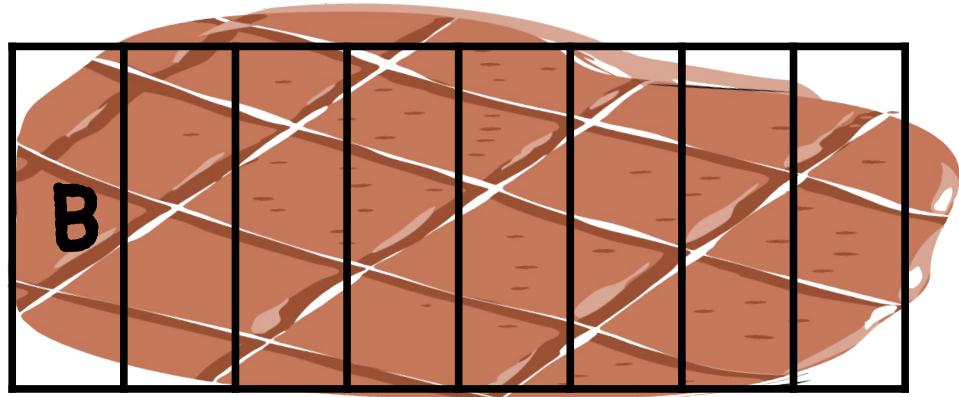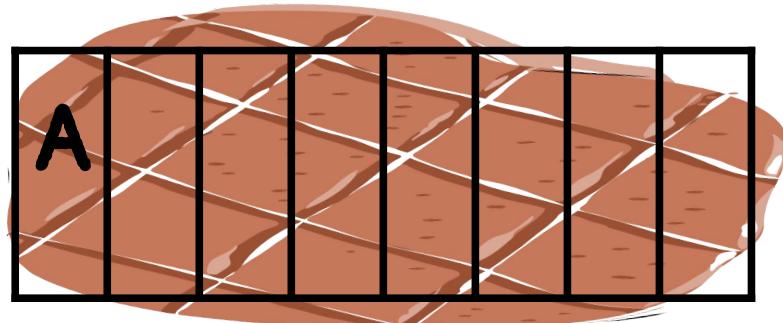
Math Chat

Math Chat
How did you determine if each taco got the same amount of ingredients?
Why does the size of the whole ingredient matter when comparing fractional parts?
What would you report to the restaurant owners about why their customers are complaining?

Math Chat

Question 1:

How did you determine if each taco got the same amount of ingredients?

Math Chat

Question 2:

Why does the size of the whole ingredient matter when comparing fractional parts?

Math Chat

Question 3:

What would you report to the restaurant owners about why their customers are complaining?

Compare Fractions SAMPLE

Fluency Builder - Mark the Spot

Description

Students play this game in pairs. They compare fractions used in context and fractions represented on number lines and bar tiles. Each time they make a comparison, they mark their spot on the game board with a counter. The first player to place all counters on the board wins.

Materials

Printed

1 Instruction Sheet (per pair)
1 Game Board (per pair)
1 Set of Problem Cards (per pair)
1 Student Reflection Sheet (per student)

Reusable

20 Counters (10 of one color and 10 of another color, per pair)
1 Envelope or resealable bag (per pair)

Preparation

- Copy a game board per pair of students and a student reflection sheet per student.
- Copy and cut out a set of Problem Cards per pair of students. It is suggested that you laminate the game board and the cards and store them in a resealable bag or envelope for long-term use.

Procedure and Facilitation Points

1. Students shuffle the deck of cards and place them facedown in a pile.
2. Each player takes 10 counters of the same color.
3. Players take turns drawing a card. Upon drawing a card, the player finds the matching fraction on the game board and places a counter on top. Plays may result in these outcomes:
   - If a player draws a card with an answer that has already been covered by the opponent, the player may remove the opponent's counter from the game board and add the player's own colored counter instead. In this case, the opponent takes back the removed counter.
   - If a player draws a card with an answer that has already been covered with his or her own colored counter, the player stacks a second counter on top of this spot, making the spot safe. When a spot is marked safe, the counter remains on the game space for the remainder of the game (it cannot get knocked out).
4. After each draw, players place the cards in a separate pile (each card is used only once).
5. The winner is the first to put all counters on the game board. If both players still have counters and all game cards have been drawn, the winner is the player with more counters on the game board.
6. Students complete the student reflection sheet, and then share their reflections with their partners.
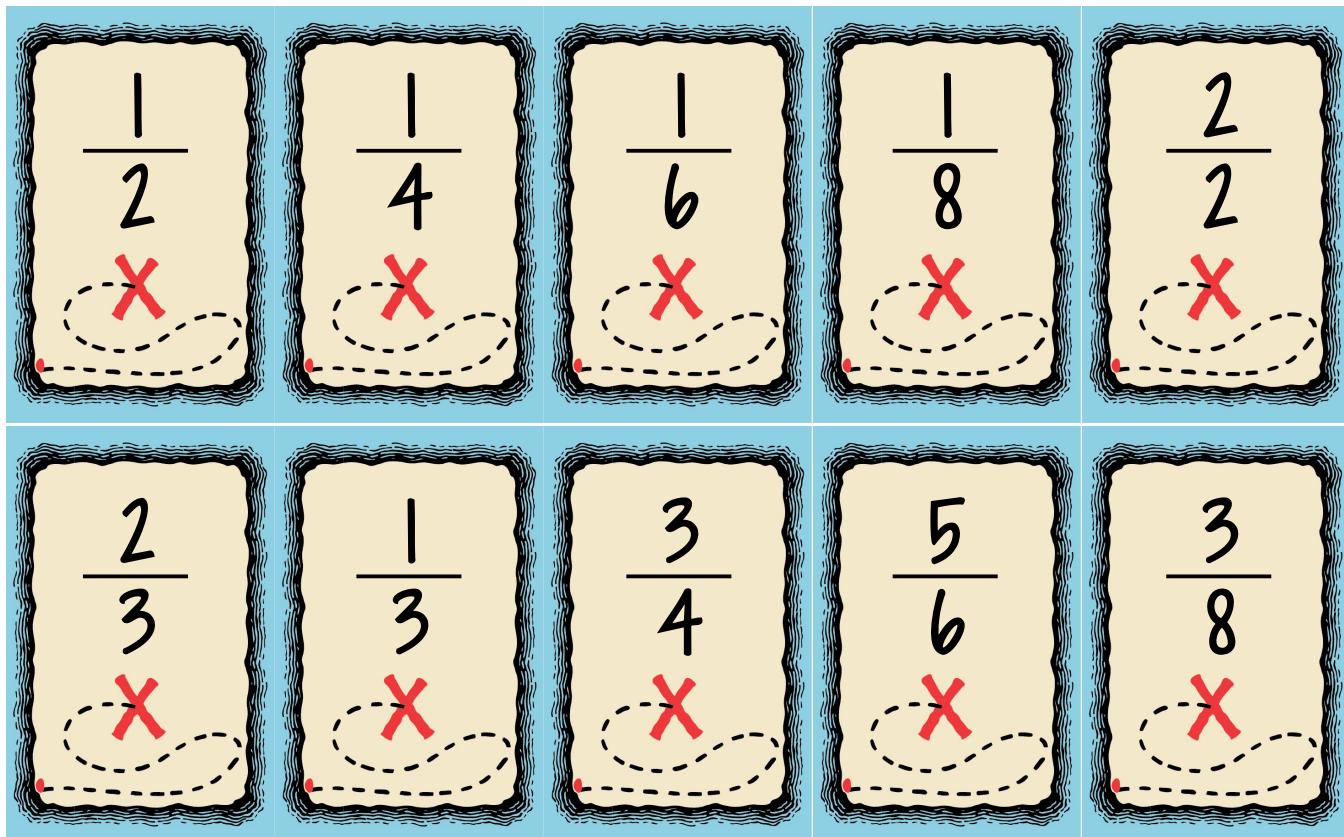
Compare Fractions

Fluency Builder

Mark the Spot
Game Board

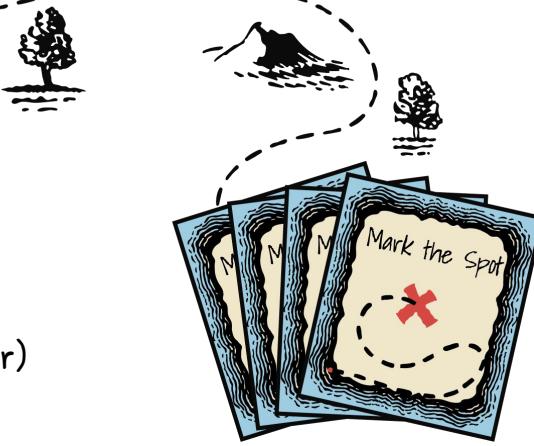|				
$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{6}$	$\frac{1}{8}$	$\frac{2}{2}$
$\frac{2}{3}$	$\frac{1}{3}$	$\frac{3}{4}$	$\frac{5}{6}$	$\frac{3}{8}$

Compare Fractions

Fluency Builder

Mark the Spot

Play this game in pairs.

You Will Need
1 Game board (per pair)
1 Deck of problem cards (per pair)
1 Student reflection sheet (per student)
20 Counters (10 of one color and 10 of another color)

How to Play
1. Shuffle the deck of cards and place them facedown in a pile.
2. Each player takes 10 counters of the same color.
3. Take turns drawing a card. Solve the comparison question on the card and make sure your opponent is in agreement with your answer. Find the matching fraction on the game board and place a counter on top. Plays may result in these outcomes:
   - If a player draws a card with an answer that has already been covered by the opponent, the player may remove the opponent's counter from the game board and add the player's own colored counter instead. In this case, the opponent takes back the removed counter.
   - If a player draws a card with an answer that has already been covered with his or her own colored counter, the player stacks a second counter on top of this spot, making the spot safe. When a spot is marked safe, the counter remains on the game board for the remainder of the game (it cannot get knocked out).
4. After each draw, place the cards in a separate pile (each is used only once).
5. The winner is the first to put all his or her counters on the game board. If both players still have counters and all game cards have been drawn, the winner is the player with more counters on the game board.
6. Complete the student reflection sheet, and then share your reflections with your partner.
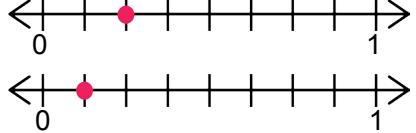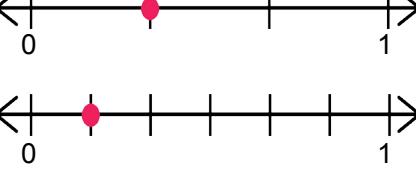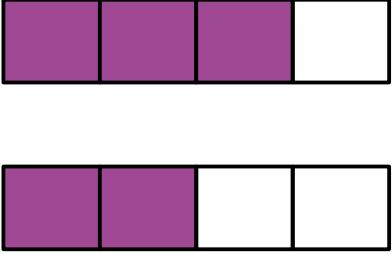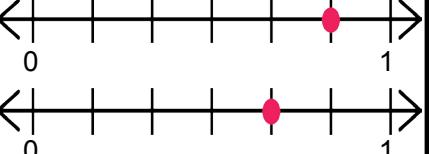
Fluency Builder

Mark the Spot: Problem Cards

There were two pizzas of the same size. The first pizza had pepperoni on one-half of it. The second pizza had pepperoni on one-third of it. Which fraction represents the portion of pizza with more pepperoni on it?	Two identical-sized sandwiches were made for lunch. Your sister ate one-half of her sandwich, and your brother ate two-halves of his sandwich. Which fraction represents the smaller portion eaten?	One-fourth of a trail is paved, and three-fourths of the trail is dirt. Which fraction represents the portion of the trail that is shorter?
What fraction represents the greater value on the number lines below?	What fraction represents the bar model with the lesser value shaded?	What fraction represents the bar model with the lesser value shaded?
Mark and Belle have the same math homework worksheet to complete. Mark finished one-half of his homework. Belle finished two-halves of her homework. Which fraction represents the greater amount of completed work?	What fraction represents the bar model with the greater value shaded?	What fraction represents the greater value on the number lines below?

Compare Fractions

Fluency Builder

Mark the Spot: Problem Cards

Kerrie is deciding between two walking tours. She loves seeing historical sites. The first tour spends one-fourth of the time looking at historical sites. The second tour spends one-sixth of the time looking at historical sites. Which tour should Kerrie choose?	What fraction represents the lesser value on the number lines below?	Rose studied for two-thirds of an hour. Anthony studied for two-sixths of an hour. Which fraction represents the longer amount of time spent studying?
John spends one-fourth of the day at work and one-third of the day sleeping. Which fraction of time is a longer part of John's day?	What fraction represents the greater value on the number lines below?	What fraction represents the bar model with the greater value shaded?
What fraction represents the greater value on the number lines below?	Joe and Beth are reading the same book. Joe has read five-eighths of the book, and Beth has read five-sixths of the book. Which fraction represents the greater portion read?	What fraction represents the bar model with the lesser value shaded?

Compare Fractions

Fluency Builder
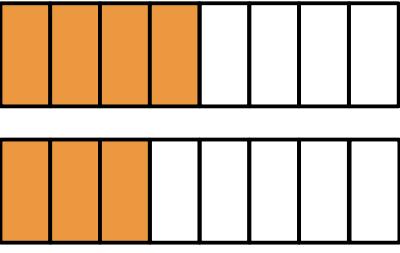
Mark the Spot: Problem Cards

| Which is larger: a slice that is three-fourths the size of the entire cake or a slice that is three-eighths the size of the entire cake? | A cookie recipe uses three-eighths of a cup of sugar. A cupcake recipe uses three-fourths of a cup of sugar. Which fraction represents the greater amount of sugar? | What fraction represents the bar model with the lesser value shaded? |

Compare Fractions

Fluency Builder

Name: _____ Date: _____

Mark the Spot
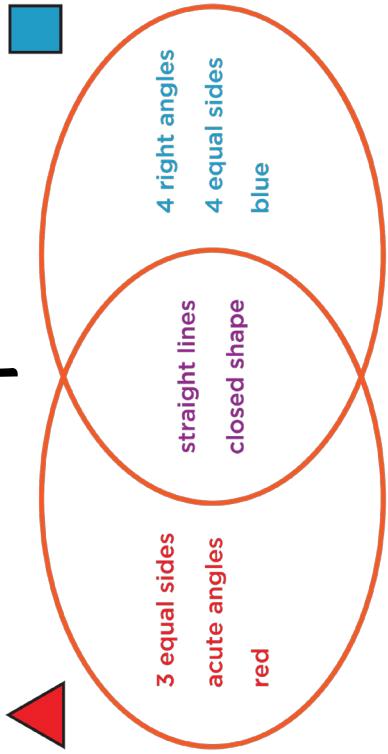## Student Reflection Sheet

Choose a fraction from the game board that is less than one-half. Record the fraction and a matching problem card statement or model.

Fraction	Statement or Model

Choose a fraction from the game board that is greater than one-half. Record the fraction and a matching problem card statement or model.

Fraction	Statement or Model

Compare Fractions
Picture Vocabulary

Compare

3 equal sides
acute angles
red

straight lines
closed shape

4 right angles
4 equal sides
blue

To determine similarities or differences between two or more objects or numbers

Fraction

$$\frac{3}{4}$$

3 equal parts of 4 are blue
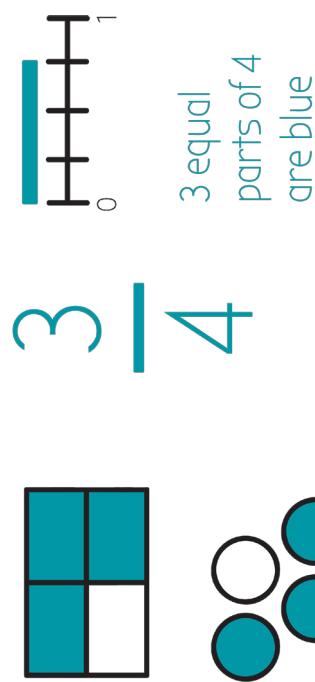
A number that represents a part of a whole or a part of a set

Numerator

$$\frac{Numerator}{Denominator}$$

$$\frac{3}{4}$$
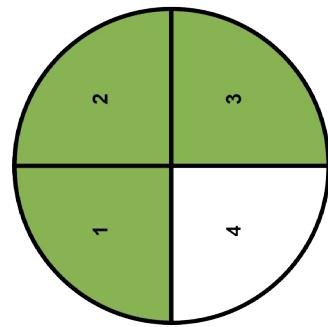
The top number in a fraction; represents part of a whole

WHAT IS DAILY NUMERACY?

The goal of Daily Numeracy is to empower students to reason with numbers in an accurate, efficient, and flexible way. We have included a carefully crafted, purposeful activity sample designed to help students build their thinking and reasoning around relationships and connections. Each grade level has numerous Daily Numeracy activities.

Not Like the Others Activity

DESCRIPTION

Students describe the characteristics of an object in a set of 4 and discuss how it is different from the others.

MATERIALS

PRINTED

- 1 Slideshow (per class)

REUSABLE

- 1 Projector or document camera (per class)

PREPARATION

- Prepare to project the Slideshow prompt of the day for the class.

PROCEDURE AND FACILITATION POINTS

1. Gather students together and project the Slideshow prompt of the day. Students should not have anything with them for this activity.

2. Give students a minute of silent think time as they look at the pictures on the prompt. Ask students relevant guiding questions:

   a. What do you notice?

   b. Which one is not like the others?

   c. What characteristic makes it different?

   d. How are these objects similar?

   e. Do you see another object that is not like the others?

3. Listen to multiple student responses. Accept any answer with accurate reasoning.

4. As students discuss which one is not like the others, ask the class if they agree or disagree. Provide the following sentence stems for their responses:

   a. I agree because …

   b. I disagree because …

   c. Can you explain why you …?

Daily Numeracy
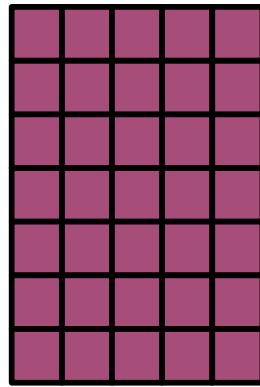
7 x 5

5　5

5　5　5

5　　5
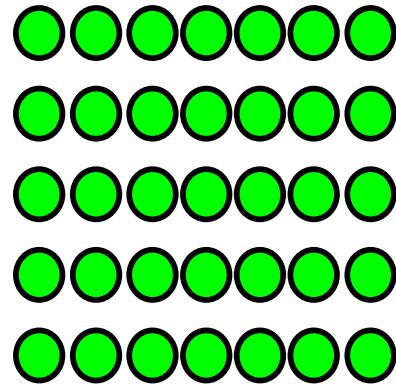
WHAT IS FACT FLUENCY?

In order for students to be successful as they progress into upper grades, they need to have a solid understanding of the concepts of addition and subtraction, and they also need to be fluent in the thinking strategies necessary for solving such facts. As you use the STEMscopes Math program, you will come to see how your students are starting to rely on their thinking skills and strategies as opposed to their fingers or skip-counting methods. Each grade level has numerous Fact Fluency activities.

Sixes Game Mini-Lesson

DESCRIPTION

Students will practice their understanding of the strategies for multiplying and dividing by six.

MATERIALS

PRINTED

- 1 Set of game boards (per station)
- 1 Multiplication spinner (per station)
- 1 Division spinner (per station)

REUSABLE

- 30 Two-color counters (15 per player)
- 1 Paper clip (per station)
- 1 Pencil (per station)

PREPARATION

- Allow students to have access to a variety of mathematical tools and models in order to scaffold their thinking.
- Print on card stock paper and laminate, if desired, for continued use.
- Have game board, spinners, and counters at each station's center ready for student use.
- Students will use the paper clip and pencil for the spinner.

PROCEDURE AND FACILITATION POINTS

1. Each station group will get out a multiplication game board, multiplication spinner, and counters for the group to share.
2. Game instructions:
   a. Player 1 is the red side of the counters and Player 2 is the yellow side of the counters.
   b. Player 1 spins the multiplication spinner.
   c. Player 1 multiplies the number spun by six.
   d. Player 1 verbalizes the strategy.
   e. Player 1 covers the product with a counter.
   f. Player 2 takes his or her turn, repeating the process.
   g. The game continues until one of the players has placed four adjacent counters of his or her own horizontally, diagonally, vertically, or in a square.
   h. If the product is already covered, the player loses a turn.
3. Each station group will get out a division game board, division spinner, and counter for the group to share.
4. Game instructions:
   a. Player 1 is the red side of the counters and Player 2 is the yellow side of the counters.
   b. Player 1 spins the division spinner.
   c. Player 1 divides the number spun by six.
   d. Player 1 verbalizes the strategy.
   e. Player 1 covers the quotient with a counter.
   f. Player 2 takes his or her turn, repeating the process.
   g. The game continues until one of the players has placed four adjacent counters of his or her own horizontally, diagonally, vertically, or in a square.
   h. If the quotient is already covered, the player loses a turn.
5. Each station can continue to play for the allotted time by selecting a new game board once one of the players has four adjacent counters placed on the game board.

Fact Fluency

Sixes Multiplication Round
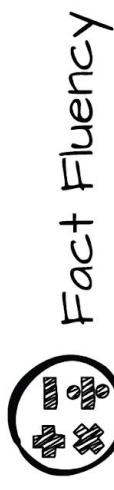
Players: Two

Materials
- ★ Two-color counters (15 per player)
- ★ 1 Sixes Multiplication Game Board
- ★ 1 Multiplication spinner

Directions
1. Player 1 spins the spinner and does the following tasks:
   a. Multiplies the number spun by six
   b. Says the strategy
   c. Covers the product with a counter
2. Player 2 takes his or her turn, repeating the process.
3. The game continues until one of the players has placed four counters in a row horizontally, diagonally, vertically, or in a square.
4. If the product is already covered, the player loses a turn.

Fact Fluency: Sixes
Game 1

Fact Fluency

48	12	30	54	36
36	60	24	18	60
42	54	18	12	6
6	30	54	48	24
12	48	36	42	30
6	24	42	60	18

SIXES MULTIPLICATION GAME BOARD A

Fact Fluency: Sixes
Game 1

Fact Fluency

12	30	24	6
36	24	48	18
6	54	18	12
42	60	30	36
24	36	54	42
6	48	60	60

SIXES MULTIPLICATION GAME BOARD B

Fact Fluency: Sixes
Game 1

Fact Fluency

SIXES MULTIPLICATION GAME BOARD C

12	30	18	6	24
48	60	54	36	42
36	6	48	30	60
42	12	24	18	54
12	54	48	6	36
24	18	30	42	60

Fact Fluency

Sixes Division Round

Players: Two

Materials

★ Two-color counters (15 per player)
★ 1 Sixes Division Game Board
★ 1 Division spinner

Directions

1. Player 1 spins the division spinner and does the following tasks:
   a. Divides the number spun by six
   b. Says the strategy
   c. Covers the quotient with a counter
2. Player 2 takes his or her turn, repeating the process.
3. The game continues until one of the players has placed four counters in a row horizontally, diagonally, vertically, or in a square.
4. If the quotient is already covered, the player loses a turn.

Fact Fluency: Sixes
Game 1

Fact Fluency

7	4	9	5	2
1	3	8	3	10
6	9	5	4	8
2	5	1	7	1
5	2	3	6	7
10	8	4	5	6

SIXES DIVISION GAME BOARD A

Fact Fluency: Sixes
Game 1

Fact Fluency

5	9	3	2	7
1	5	4	5	8
7	1	10	6	5
10	6	8	7	1
4	5	3	10	2
9	8	4	6	3

SIXES DIVISION GAME BOARD B

Fact Fluency: Sixes
Game 1

Fact Fluency

5	2	3	1	6
1	10	3	7	4
8	4	10	9	3
7	6	5	1	8
4	1	9	6	3
3	8	2	5	9

SIXES DIVISION GAME BOARD C

Fact Fluency: Sixes
Game 1

÷ 6

| 24 | 36 | 18 | 42 | 12 | 60 | 54 | 48 | 30 | 9 |

Fact Fluency

× 6

| 3 | 5 | 1 | 7 | 4 | 6 | 2 | 8 | 6 | 10 |