

Classroom Mathematics

California

Teacher Toolbox

Resource Sampler



GRADE

5

by  i-Ready

Engaging Resources to Drive Student Growth

The Teacher Toolbox for *Classroom Mathematics California* is an important part of your digital experience and companion to your Teacher's Guide, as it houses many of the resources you need to deliver effective core mathematics instruction. You'll see references to specific Teacher Toolbox resources throughout the Teacher's Guide, pointing you to materials you can use for whole class instruction and small group differentiation. The Teacher Toolbox resources are accessible through the Teacher Digital Experience via i-ReadyConnect.com.

Easily Access All Grades K–8 Resources on the Teacher Toolbox:

- Activity Sheets 
- Assessments (Lesson Quizzes, Assessment Notes Recording Sheet, and Unit Assessments—Forms A and B) 
- Centers Library 
- Cumulative Practice 
- Digital Math Tools
- Graphic Organizers 
- Games (Unit Level for Grades K–8 and Grade Level for Grades K–2) 
- Enrichment Activities 
- Family Letters 
- Fluency and Skills Practice 
- Implementation Support
- Interactive Tutorials 
- Literacy Connection Activities 
- Learning Activities (On Level, Below Level, and Above Level) 
- Student Worktext PDFs 
- PowerPoint® Slides 
- Teacher's Guide PDFs 
- Tools for Instruction 
- Unit Flow & Progression Videos (closed captioned in English and Spanish)

 = Available in English and Spanish

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Grade 4 Teacher Toolbox Shown

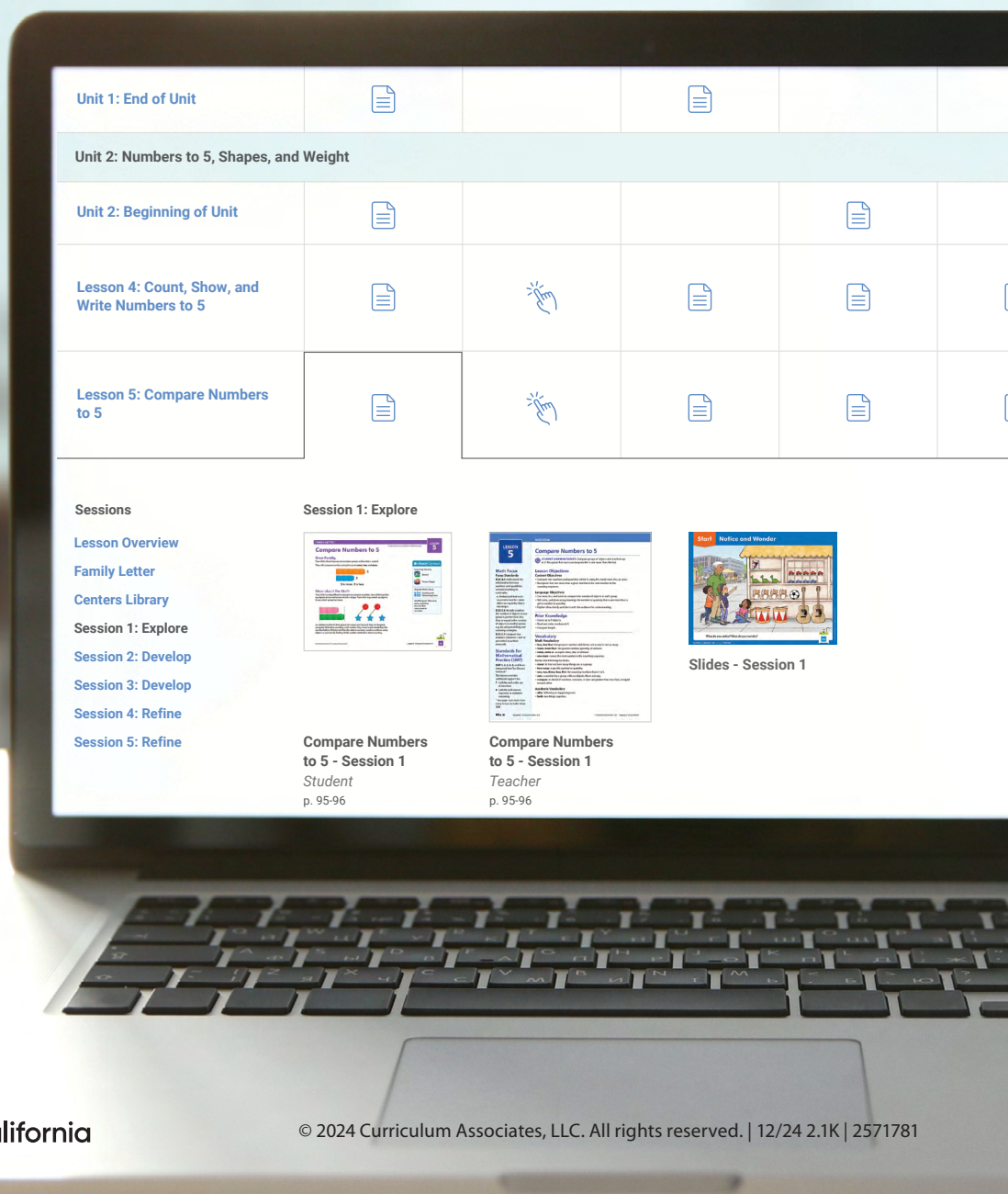


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Check out the Teacher Digital Experience Walkthrough to see more digital resources!

Explore all Grades K–8 resources in your demo account. Review the Teacher Digital Experience Walkthrough to see how.



A wealth of resources to help California educators implement *Classroom Mathematics California* as a core program, including digital versions of support found in your Teacher's Guide, plus Try–Discuss–Connect instructional framework details, pacing and correlations resources, Digital Math Tools, Data Talk Displays, and more

Program

Classroom California ...

Program Implementation

Subject

Math

Grade

K

1

2

3

4

5

6

7

8

Classroom Resources

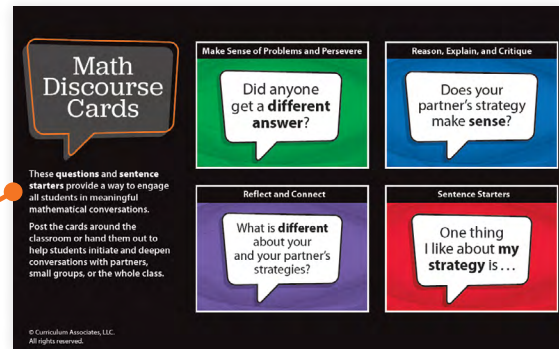
Classroom Resources (Spanish)

Assessment Practice

	Whole Class Instruction			Small Group Differentiation			
	Teach		Assess	Prepare	Reteach	Reinforce	Extend
	Instruction & Practice	Interactive Tutorials	Lesson Quizzes & Unit Assessments	Prerequisite Lessons	Tools for Instruction	Math Center Activities	Enrichment Activities

Unit 1: Whole Numbers: Place Value, Comparison, Addition, and Subtraction

- Digital Math Tools and Supporting Videos
- **Discourse Cards and Discourse Cube**
- **Activity Sheet Resources**



Discourse Card Example Shown

[illegible]

Activity Sheet Example Shown

E/S = Available in English and Spanish

Implementation Support

- **UDL Process Toolkit**
- Integrating Prerequisites into Grade-Level Instruction
- Student Handbook ^{E/S}
- Multilingual Glossary
- Bilingual Glossary
- Spanish Glossary
- Academic Vocabulary Glossary ^{E/S}
- **Data Science Resources**
- Manipulative Lists
- Digital Resource Correlations
- Comprehension Check Correlations
- Spiral Review and Cumulative Practice Correlations
- Try–Discuss–Connect Framework Resources ^{E/S}
- Positive Learning Habits

UDL PROCESS TOOLKIT FOR CLASSROOM MATHEMATICS CALIFORNIA
UDL PROCESS PLANNER • GRADE 4 EXAMPLE

UDL Process Planner Grade 4 Example

Math focus:
Compare multi-digit numbers.

Instructional component and its purpose:
The Start asks what is the same and different for four multi-digit numbers. It is an opportunity for SMP 3 and activates prior knowledge from L1, to "support students' facility with recognizing the place value of digits in whole numbers."

Students' strengths, experiences, and needs related to the math focus:

Strengths:

- SMP 3 – Students can name a similarity or difference.
- Students feel comfortable giving multiple solutions and embrace that there is not one right answer.

Needs:

- 80% of students in class are Emergent English Learners (ELs)
- 4th graders avoid using math tools because they are not "cool."

Experiences:

- Students see 3- and 4-digit numbers in real-world contexts (e.g., school size, social media likes)

1–3 Potential barriers to Engagement, Representation, Action & Expression:

- Numbers only in standard notation—no place-value names or context; does not lend itself to using math tools. Potential barrier to Representation.
- If options for participation are only verbal and only in English, it may cause anxiety. Potential barrier to Engagement and Expression.
- Being asked to explain similarities and differences in full sentences without scaffolds. Potential barrier to Expression.

Relevant supports to leverage:

1–2 Embedded supports:

- Has multiple right answers, activates prior knowledge, and builds on Lesson 1 success.
- Students have access to and are encouraged to use math tools (e.g., place value mats, digital base-ten blocks).

1–3 Additional support opportunities:

- Provide context: Invite students to give real-world examples of where they see multi-digit numbers, and draw visual models of numbers.
- Offer communication scaffolds (e.g., sentence frames) and choices (e.g., verbal, written, drawn/ modeled) for students to illustrate their thinking.

Unit: 1
Lesson: 2
Session: 1

☒ Explore
☐ Develop
☐ Refine

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Grade 4 UDL Process Toolkit Shown

DATA INVESTIGATION | STRING THEORY
UNIT 4 SAMPLE DATA

Sample Data: Estimates from Ms. Lee's Class (optional)

Actual String Lengths (inches)

$13\frac{3}{4}$	$11\frac{1}{2}$	$12\frac{3}{4}$	13	$12\frac{1}{2}$
$10\frac{3}{4}$	12	$11\frac{3}{4}$	$13\frac{3}{4}$	10
11	$10\frac{1}{2}$	$13\frac{1}{2}$	$12\frac{3}{4}$	$12\frac{1}{2}$
$12\frac{1}{4}$	$11\frac{1}{4}$	11	12	$13\frac{1}{4}$
$12\frac{3}{4}$	12	$10\frac{1}{2}$	$13\frac{1}{4}$	$9\frac{3}{4}$
$14\frac{3}{4}$	$13\frac{1}{2}$	$11\frac{1}{2}$	$12\frac{3}{4}$	13

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Grade 5 Data Investigation Example Shown

Lesson-Level Resources

Lesson 18: Fractions as Division

Additional Practice

Fluency and Skills Practice 7

Differentiation

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Extend: Enrichment Activity 14

Assessment

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Support

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Fractions as Division

Solve each problem.

- 1** Roger has 4 gallons of orange juice. He puts the same amount of juice into each of 5 pitchers. How many gallons of orange juice are in each pitcher?
- 2** Marta has 8 cubic feet of potting soil and 3 flower pots. She puts the same amount of soil in each pot. How many cubic feet of soil does she put in each flower pot if she uses all of the soil?
- 3** Greg makes 27 ounces of potato salad to serve to 10 guests at a picnic. If each serving is the same size, how much potato salad does each guest receive?
- 4** Chandra spends 15 minutes doing 4 math problems. She spends the same amount of time on each problem. How many minutes does she spend on each problem?
- 5** Taylor uses 5 yards of gold ribbon to decorate 8 costumes for the school play. She uses the same amount of ribbon for each costume. How many yards of ribbon does she use for each costume?
- 6** DeShawn uses 7 yards of wire fencing to make a play area for his puppy. He cuts the fencing into 6 pieces of equal length. How long is each piece of fencing?
- 7** What is a division word problem that can be represented by $\frac{4}{3}$?

Tools for Instruction

Interpreting Fractions as Division

Objective Interpret a fraction as division of the numerator by the denominator.

Students have been working with parts of a whole for a few years and should be able to identify, name, and model fractions. They should also be able to use models to write equivalent fractions. What students may not know is that a fraction is a way to show division, i.e., a numerator divided by a denominator. In this activity, students will draw pictures and number lines to discover that a fraction can be interpreted as a way to show division as part of a whole. This activity will help students broaden their understanding of fractions and enable them to make new connections between fractions and division.

Two Ways to Teach

Drawing to Model Fractions as Division 10–15 minutes

Have the student draw a picture to show 3 pizzas. The pizzas will be shared equally by 4 boys. Ask: *Will each boy eat more or less than 1 pizza? How do you know?* (Each boy will eat less than 1 pizza because there are more boys than there are pizzas.) Have the student divide each pizza in the drawing into fourths so that the pizzas can be evenly shared among the 4 boys. The student can shade or label pieces one by one to show how they can be shared equally among the 4 boys. Ask what fraction of a pizza each boy will receive. ($\frac{3}{4}$) Guide the student to write an equation to model the problem. ($3 \div 4 = \frac{3}{4}$) Next, have the student draw a picture to show that 5 pizzas are shared equally by 6 girls. Ask: *Will each girl eat more or less than 1 pizza? How do you know?* (Each girl will eat less than 1 pizza because the dividend is less than the divisor.) Ask the student to tell what fraction of a pizza each girl will receive. ($\frac{5}{6}$) Have the student write an equation to model the problem. ($5 \div 6 = \frac{5}{6}$) Repeat with similar problems as needed. Write the equations on the board so that the student can begin to see the pattern that emerges. Guide the student to see that the dividend in the division expression becomes the numerator of the fraction and that the divisor in the division expression becomes the fraction's denominator.

Support English Learners Present the student with a visual representation that connects the numerator of a fraction to the dividend of a division expression and the denominator of the fraction to the divisor of the expression.

Use a Number Line to Model a Fraction as Division 10–15 minutes

Write " $1 \div 4$ " on the board. Have the student draw a number line with one end labeled 0 and the other labeled 1. Say: *This problem asks us to divide one by four. So, we will divide this number line into four equal parts.* Guide the student to draw in marks and labels for fourths so that the line shows 0, $\frac{1}{4}$, $\frac{2}{4}$, $\frac{3}{4}$, 1. Discuss that in the expression $1 \div 4$, only one part of the whole is being counted. Guide the student to shade along the number line from 0 to $\frac{1}{4}$ to show the division of 1 by 4. Then show the student how to write an equation to model the problem. ($1 \div 4 = \frac{1}{4}$) Write " $3 \div 4$ " on the board. Discuss that three wholes are being divided by 4. Have the student draw another number line to 3 and divide each whole into fourths. Remind the student that they need to count $\frac{1}{4}$ from each whole. Have the student write an equation to show the problem. ($3 \div 4 = \frac{3}{4}$) Repeat with other examples. Write the equations on the board so that the student can begin to see the pattern that emerges. (The number of equal parts is the denominator. The number of wholes is the numerator.)

Tools for Instruction

Check for Understanding

Present the student with the following problem: *5 pies are shared equally by 8 students. What fraction of a pie will each student receive?* Have the student draw a model or use a number line to represent the division. Then have the student write an equation to solve the problem. ($5 \div 8 = \frac{5}{8}$)

For the student who struggles, use the table below to help pinpoint where extra help may be needed.

If you observe...	the student may...	Then try...
the student divides 8 by 5 instead of dividing 5 by 8,	not have drawn an accurate model.	having the student talk through the parts of the problem as they are creating a representation to help solve the problem.



Fractions As Quotients

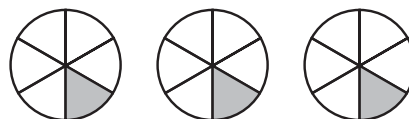
What You Need

- Recording Sheet

What You Do

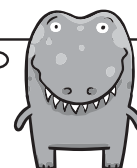
1. Take turns. Choose a division model from the **Recording Sheet**.
2. Tell your partner a division equation that represents the model.
3. Your partner tells you a multiplication equation that represents the model.
4. Say how the two equations are related.
5. If your partner agrees, you each write your equation on the **Recording Sheet** in the space below the model.

The division model



shows $3 \div 6 = \frac{3}{6}$, because there are 3 wholes each divided into 6 parts.

I can check the quotient by writing a related multiplication equation:
 $\frac{1}{6} \times 3 = \frac{3}{6}$.



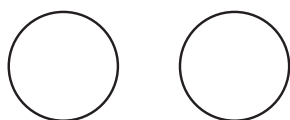
Check Understanding

Sketch a model to find the quotient of $3 \div 8$. Write a division equation and a multiplication equation to represent the model.



Go Further

Partition and shade the model to show that the quotient $\frac{2}{5}$ represents the division of the numerator by the denominator. Have your partner write a multiplication equation and division equation for the model.





CENTER ACTIVITY ●●

LESSON 18

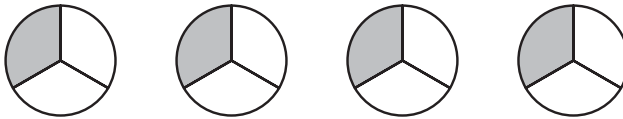
Partner A: _____

Partner B: _____

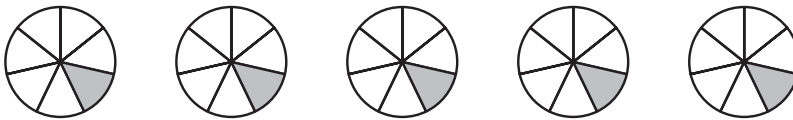
Fractions As Quotients Recording Sheet

A

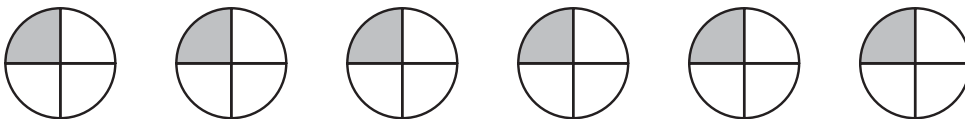
$$\underline{\hspace{2cm}} \div \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \quad \underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

B

$$\underline{\hspace{2cm}} \div \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \quad \underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

C

$$\underline{\hspace{2cm}} \div \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \quad \underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

D

$$\underline{\hspace{2cm}} \div \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \quad \underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$



Below Level shown
here. Above Level
also available.

Fractions As Quotients

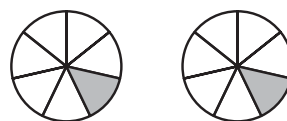
What You Need

- Recording Sheet

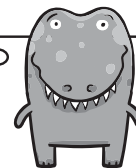
What You Do

1. Take turns. Choose a division model from the **Recording Sheet**. Use numbers from the number bank to write the answers.
2. Choose your numbers carefully. Some numbers will be used more than once.
3. Tell your partner a division equation that represents the model.
4. Your partner tells you a multiplication equation that represents the model.
5. Say how the two equations are related.
6. If your partner agrees, you each write your equation on the **Recording Sheet** in the space below the model.

If my model looks like this,



then my division equation
would be $2 \div 7 = \frac{2}{7}$, and my
multiplication equation would
be $\frac{1}{7} \times 2 = \frac{2}{7}$.



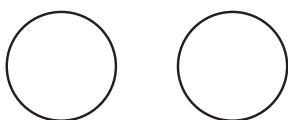
Check Understanding

Sketch a model to find the quotient of $3 \div 4$. Write a division equation and a multiplication equation to represent the model.



Go Further

Partition and shade the model to show $2 \div 3$. Have your partner write a division equation and a multiplication equation for the model.





CENTER ACTIVITY ●

LESSON 18

Partner A: _____

Partner B: _____

Fractions As Quotients Recording Sheet

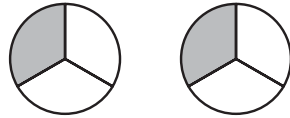
Number Bank												
2	3	4	5	$\frac{3}{2}$	$\frac{1}{3}$	$\frac{2}{3}$	$\frac{5}{3}$	$\frac{5}{4}$	$\frac{1}{4}$	$\frac{1}{5}$	$\frac{3}{5}$	$\frac{4}{5}$

A



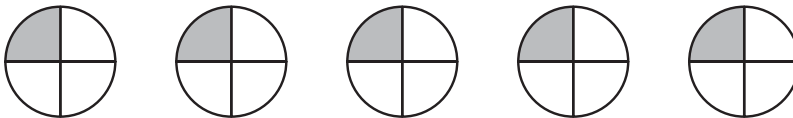
_____ ÷ _____ = _____ _____ × _____ = _____

B



_____ ÷ _____ = _____ _____ × _____ = _____

C



_____ ÷ _____ = _____ _____ × _____ = _____



ENRICHMENT ACTIVITY

Name: _____

LESSON 18

Pizza Party

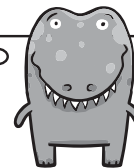
Your Challenge

You and some of your friends order small pizzas and eat equal shares.

- No one eats exactly $\frac{1}{2}$ of a pizza, 1 whole pizza, or $1\frac{1}{2}$ pizzas.
- Two full pizzas are too much for anyone to eat.
- After everyone has an equal share, there is $\frac{1}{2}$ of a pizza left.
- Small pizzas have 6, 8, or 12 slices.

1. How many friends and pizzas could there have been, and how much pizza could each friend have eaten? Draw a picture on the **Recording Sheet** to show how the friends could have shared the pizza and write an equation to represent the situation.
2. Is there another way those friends could have shared the pizza? Show how you know on the **Recording Sheet**.

What if all the pizzas do not have the same number of slices?





ENRICHMENT ACTIVITY

Name: _____

LESSON 18

Pizza Party

1.

2.



LESSON 18 • QUIZ

Name: _____

Solve the problems.

- 1** Sara uses 7 cups of apples to make 4 batches of applesauce.
Which expressions show the number of cups of apples in one batch?

Decide if each expression is correct.

Choose *Yes* or *No* for each expression.

	Yes	No
$7 \div 4$	(A)	(B)
$\frac{1}{7} + \frac{1}{7} + \frac{1}{7} + \frac{1}{7}$	(C)	(D)
$\frac{4}{7}$	(E)	(F)
$7 \times \frac{1}{4}$	(G)	(H)
$1\frac{3}{4}$	(I)	(J)

- 2** Which of the following situations can be represented by $\frac{14}{5}$?
Choose all the correct answers.

- (A) Renee has 14 feet of ribbon that she cuts into 5 pieces of equal length.
- (B) Michael has 14 packs of trading cards with 5 cards in each pack.
- (C) Logan opens 5 bags of trail mix and pours them equally into 14 bowls.
- (D) Patrick takes 5 oranges from a bag containing 14 oranges.
- (E) Tim walks 14 blocks to the library and then walks another 5 blocks home.
- (F) Arianna cuts a piece of fish that weighs 14 ounces into 5 equal servings.



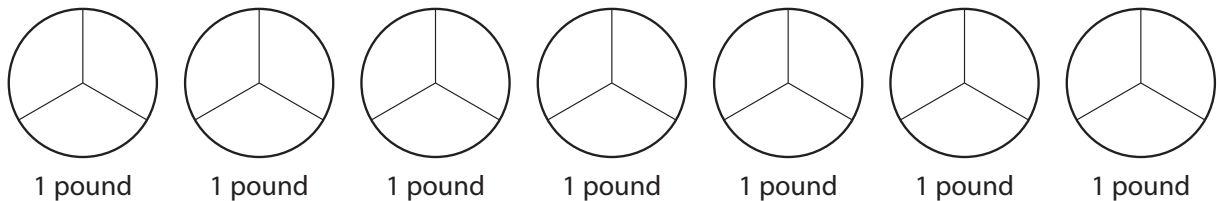
LESSON 18 • QUIZ

Name: _____

- 3 Ava pours 3 gallons of paint equally into 8 cans. How many gallons of paint are there in each can? Show your work.

Solution _____

- 4 Micah has several pounds of sliced peaches. He shares them equally among three containers. The model represents this division.

**Part A**

Which situation does the model represent?

- (A) Micah divides 7 pounds of peaches into 3 equal groups.
- (B) Micah divides 3 pounds of peaches into 7 equal groups.
- (C) Micah divides 1 pound of peaches into groups of $\frac{1}{3}$ pound.
- (D) Micah divides 7 pounds of peaches into groups of $\frac{1}{7}$ pound.

Part B

The weight in pounds of the peaches in each container is between which two whole numbers? Show your work.

Solution _____

Fractions as Division

LESSON
18

Math Tools

Number Line

Fraction Models

Dear Family,

This week your child is learning how fractions and division are related.

Your child might see a problem like the one below.

Three family members equally share 4 granola bars. How much does each family member receive?

This word problem can be represented as a division problem. The family equally shares 4 granola bars among 3 people, so the division problem to solve is $4 \div 3$.

A model is a useful way to show the problem. The model below shows 4 wholes. Each whole is divided into 3 parts.



Each family member receives $\frac{1}{3}$ of each of 4 whole bars. So, the answer to the division problem $4 \div 3$ is $\frac{4}{3}$. You can say that the fraction $\frac{4}{3}$ represents the division problem $4 \div 3$.

This shows how fractions and division are related. You can think of fractions as the division of two numbers.

Another way to write the fraction $\frac{4}{3}$ is to show it as a mixed number. So, each family member receives $\frac{4}{3}$, or $1\frac{1}{3}$, granola bars.

Invite your child to share what they know about how fractions and division are related by doing the following activity together.



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Lesson 18 Fractions as Division 373

FRACTIONS AS DIVISION

to explore fractions as division.

opportunities to practice modeling a division

think of things that can be shared equally among
boxes of crackers or bags of grapes.

gether with your child to show how to equally
ms among the people in your family.

Example: 4 family members equally share 7 bags of trail mix.

- Have your child represent the situation as a division problem.
- Have your child explain how much of the item each family member gets.

Example: $7 \div 4 = \frac{7}{4}$

Example: Each person gets $\frac{7}{4}$, or $1\frac{3}{4}$, bags of trail mix.



374 Lesson 18 Fractions as Division

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SESSION 1

Explore

Fractions as Division



Learning Targets

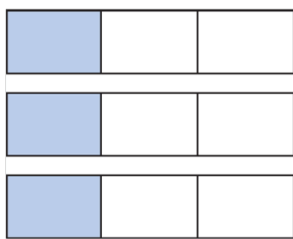
- Understand fractions as division.
- Write the quotient of two whole numbers as a fraction or a mixed number.

LESSON 18 • Fractions as Division

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Use for Teacher Toolbox Materials.

Start

Same and Different



$$\frac{1}{4} + \frac{1}{4} + \frac{1}{4}$$

A B
C D

$$3 \times \frac{1}{4}$$

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

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Unit-Level Resources

Unit 3: More Decimals and Fractions: Multiplication and Division

Unit Game	<u>21</u>
Literacy Connection	<u>23</u>
Mid-Unit Assessment (Form A)	<u>27</u>
Unit Assessment (Form A)	<u>32</u>



GAME

UNIT 3

Name: _____

Fraction and Decimal Products

What you need: *Fraction and Decimal Products*

Recording Sheet, 1 number cube (1–6)



Directions

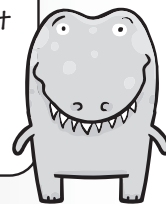
- Both players roll the number cube 4 times and record the four digits at the top of the Recording Sheet. Players use these same digits for Rounds 1 through 4.
- In Round 1, the player with the *greatest product* wins the round. Use the digits to make two fractions and multiply them. Record the product on the Recording Sheet.
- In Round 2, the player with the *least product* wins the round. Make two fractions and multiply them. Record the product.
- In Round 3, the player who makes the *greatest product* wins. Make two tenths decimals and multiply them. Record the product.
- In Round 4, the player who makes the *least product* wins. Again, make two tenths decimals and multiply.
- In Round 5, the players decide together whether to multiply fractions or decimals and whether to try for the greatest or least result. Players circle their choices on the Recording Sheet. After deciding, players both roll 4 new numbers to use in the final round.

GAME UNIT 3 Name: _____

Fraction and Decimal Products Recording Sheet

Pam		Scott	
Player A Name		Player B Name	
Digits: 2 4 6 1		Digits: 5 3 1 4	
Greatest Product 1. $\frac{4}{2} \times \frac{6}{1} = 12$		Greatest Product 1. $\frac{5}{1} \times \frac{4}{3} = 6\frac{2}{3}$	
Least Product		Least Product	

The greater the fractions, the greater the sum. But is that true when multiplying two fractions?





GAME

UNIT 3

Name: _____

Fraction and Decimal Products Recording Sheet

Player A Name
Digits:
Greatest Product

1. $\frac{\square}{\square} \times \frac{\square}{\square} = \square$

Least Product

2. $\frac{\square}{\square} \times \frac{\square}{\square} = \square$

Greatest Product

3. $\square.\square \times \square.\square$

Least Product

4. $\square.\square \times \square.\square$

Greatest Product/Least Product

5. $\frac{\square}{\square} \times \frac{\square}{\square} = \square$

$\square.\square \times \square.\square$

Player B Name
Digits:
Greatest Product

1. $\frac{\square}{\square} \times \frac{\square}{\square} = \square$

Least Product

2. $\frac{\square}{\square} \times \frac{\square}{\square} = \square$

Greatest Product

3. $\square.\square \times \square.\square$

Least Product

4. $\square.\square \times \square.\square$

Greatest Product/Least Product

5. $\frac{\square}{\square} \times \frac{\square}{\square} = \square$

$\square.\square \times \square.\square$

ANCIENT Saharan Trade Routes

by Joris Maddrin

1 The Sahara is a vast desert in northern Africa. It stretches from the Atlantic Ocean in the west to the Red Sea in the east. Its size and harsh conditions make travel hazardous. Nevertheless, trade thrived here from the 700s to the 1500s. It continues to this day.

2 Long ago, Berber merchants established a network of trade routes across the Sahara. These routes linked markets in North Africa, the Middle East, and Europe with markets in West Africa. The merchants regularly crossed the Sahara to African settlements on the fringes of the desert. In those settlements, they traded salt, horses, cloth, and later, books for gold, metals, spices, and other items from farther south. Berber and African merchants made profits, so trade increased. As a result, the African settlements grew to become important centers of trade. And as trade increased, so did the wealth and power of the West African rulers.

3 To Berber merchants, the dangerous journey across the Sahara was worth the risk. For safety, merchants traveled together in large groups known as caravans. Using camels to transport their goods, caravans walked about 200 miles a week. Even at that pace, however, the trip took more than three months.

4 The merchants' use of camels made it possible for them to cross the Sahara. These hardworking animals could carry heavy loads with ease over scorching, shifting sands. During long journeys, they had the ability to conserve water. Camels were called "ships of the desert" because they hauled trade goods across the desert, just as ships carried cargo across the sea.





Literacy Connection: Social Studies

“Ancient Saharan Trade Routes”: Multiply a Decimal by a Whole Number

Use the table to solve the problems. Show your work. Then answer the question by completing the sentence.

After reading about the Ancient Saharan Trade Routes, the fifth graders at an elementary school decide to start a crafts and goods store. The store is a place where students can sell items they make. The table below shows the items for sale and prices for those items at the “Fifth Grade Crafts and Goods Store.”

Item	Price per Item
Cookie	\$0.60
Pencil Box	\$2.55
Cupcake	\$0.75
Hat	\$5.33
Book Cover	\$0.99

- 1** Sergio wants to buy 5 cookies. How much money does he need to buy the cookies?

Sergio needs _____ to buy the cookies.



Literacy Connection: Social Studies *continued*

- 2** If Mr. Jenkins buys 8 book covers, what is the total amount he will pay for them?

Mr. Jenkins will pay _____ for the book covers.

- 3** If Mrs. Nash buys 7 pencil boxes, what is the total amount she will pay for them?

Mrs. Nash will pay _____ for the pencil boxes.



Literacy Connection: Social Studies *continued*

- 4** Gabby has \$5.00. She wants to buy 4 cookies and 4 cupcakes. Does Gabby have enough money? Explain your answer.



UNIT 3 • MID-UNIT ASSESSMENT 1

Name: _____

FORM A

Form A shown here. Digital Comprehension Checks and Form B are also available.

Solve the problems.

- 1** Mitchell buys a rectangular rug that is 3.8 meters long and 0.9 meter wide. How many square meters does the rug cover? Record your answer on the grid. Then fill in the bubbles.

•	•	•	•	•	•
0	0	0	0	0	0
1	1	1	1	1	1
2	2	2	2	2	2
3	3	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5
6	6	6	6	6	6
7	7	7	7	7	7
8	8	8	8	8	8
9	9	9	9	9	9

- 2** Ma Lee swims for 4 weeks. Each week she swims for 6.3 hours. Ma Lee wants to know how many hours she swims in 4 weeks.

Ma Lee draws the area model below to find the product of 4 and 6.3.

	6	0.3
4	$4 \times 6 = ?$	$4 \times 0.3 = ?$

How many hours does Ma Lee swim in 4 weeks? Write your answer in the blank.

_____ hours

- 3** A plant grows 1.8 centimeters each month. There are 12 months in a year. How many centimeters does the plant grow in 1 year? Show your work.

Solution _____



UNIT 3 • MID-UNIT ASSESSMENT 1

Name: _____

FORM A continued

- 4** Kalani finds 0.05×0.8 on a calculator. The calculator shows a product of 0.04. Kalani says the calculator must be broken because multiplying tenths by hundredths gives a product in the thousandths. Is Kalani's calculator broken? Explain.

- 5** What is the product of 0.7 and 3.4?

- Ⓐ 0.238
Ⓑ 2.38
Ⓒ 23.8
Ⓓ 238



UNIT 3 • MID-UNIT ASSESSMENT 1

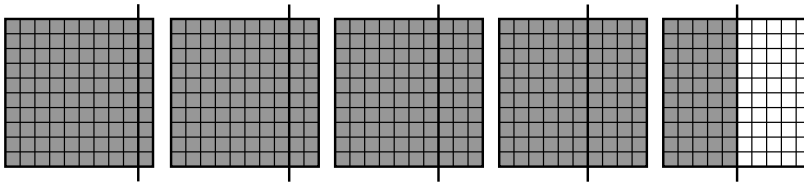
Name: _____

FORM A continued

- 6** Alyssa is helping to set up drinks and snacks for a luncheon.

Part A

Alyssa has 4.5 liters of orange juice to pour into pitchers. She pours 0.9 liter of orange juice into each pitcher. Alyssa draws the model below to show how many pitchers she fills. Is Alyssa's model correct? Explain.



Part B

Alyssa combines a 40.2-gram bag of peanuts and a 51.3-gram bag of almonds. She puts an equal amount of the combined peanut and almond mix into each of 3 snack bags. How many grams of mix does Alyssa put into each snack bag? Show your work.

Solution _____



UNIT 3 • MID-UNIT ASSESSMENT 1

Name: _____

FORM A continued

- 7** A customer buys 6 yards of fabric. Each yard of the fabric costs \$1.75. What is the total cost of the fabric? Show your work.

Solution _____

- 8** Erynn has 3.28 gigabytes of data available on her phone. She wants to stream 30-minute videos. Each video uses 0.82 gigabyte of data. How many videos can Erynn stream? Show your work.

Solution _____



UNIT 3 • MID-UNIT ASSESSMENT 1

Name: _____

FORM A continued

- 9** Samantha has \$3.45. She wants to buy pencils at the school store. Each pencil costs \$0.23. Which division equation and related multiplication equation could Samantha use to find how many pencils she can buy?

Ⓐ $0.23 \div ? = 3.45$
 $0.23 \times ? = 3.45$

Ⓑ $0.23 \div 3.45 = ?$
 $3.45 \times ? = 0.23$

Ⓒ $3.45 \div ? = 0.23$
 $0.23 \times 3.45 = ?$

Ⓓ $3.45 \div 0.23 = ?$
 $0.23 \times ? = 3.45$

- 10** DeShawn has 3.5 bottles of water. Each full bottle holds 8.25 fluid ounces. DeShawn wants to know how many fluid ounces of water he has in all.

Part A

DeShawn draws this area model to find the partial products. Complete the area model.

	8	0.2	0.05
3	24		
0.5			0.025

Part B

How many fluid ounces of water does DeShawn have in all?
 Show your work.

Solution _____



UNIT 3 • UNIT ASSESSMENT

Name: _____

FORM A

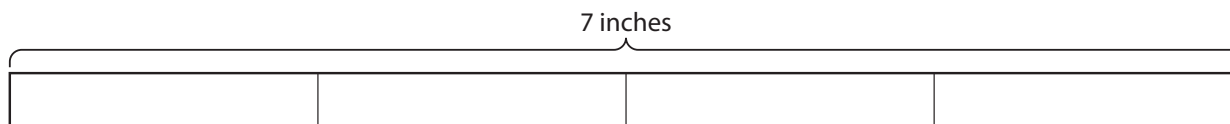
Form A shown here. Digital Comprehension Checks and Form B are also available.

Solve the problems.

- 1 A hiking trail is $2\frac{3}{5}$ miles long. Lucy walks $\frac{1}{2}$ of the trail before stopping for a water break. How many miles does Lucy walk before stopping? Show your work.

Solution _____

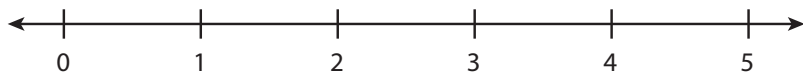
- 2 A bar that measures 7 inches long is divided into 4 equal parts. What is the length of one of those parts?



Use fractions or mixed numbers to find the length of one part. Complete the equation. Write your answer in the blanks.

_____ $\times$ 7 inches = _____ inch(es)

- 3 Mateo has 5 pints of blueberries. He divides the blueberries into $\frac{1}{4}$ -pint servings. How many servings does he make? Show your work.



Solution _____



UNIT 3 • UNIT ASSESSMENT

Name: _____

FORM A continued

- 4** Without multiplying, decide if each expression is less than, greater than, or equal to $\frac{3}{5}$.

Choose *Less than* $\frac{3}{5}$, *Greater than* $\frac{3}{5}$, or *Equal to* $\frac{3}{5}$ for each expression.

	Less than $\frac{3}{5}$	Greater than $\frac{3}{5}$	Equal to $\frac{3}{5}$
$\frac{5}{5} \times \frac{3}{5}$	(A)	(B)	(C)
$\frac{7}{4} \times \frac{3}{5}$	(D)	(E)	(F)
$\frac{4}{7} \times \frac{3}{5}$	(G)	(H)	(I)
$\frac{8}{8} \times \frac{3}{5}$	(J)	(K)	(L)
$\frac{9}{10} \times \frac{3}{5}$	(M)	(N)	(O)

- 5** Amanda buys 2.5 pounds of nuts. The nuts cost \$4.36 per pound. Amanda wants to know the total cost of the nuts.

Part A

Amanda draws this area model to find the partial products. Complete the area model.

	4	0.3	0.06
2	8	_____	_____
0.5	_____	_____	0.03

Part B

How much do the nuts cost in all? Show your work.

Solution _____



UNIT 3 • UNIT ASSESSMENT

Name: _____

FORM A continued

- 6** A teacher has a stack of booklets that is 3.6 centimeters tall. The thickness of each booklet is 0.72 centimeter. How many booklets are in the stack? Show your work.

Solution _____

- 7** Willow has $\frac{3}{4}$ yard of ribbon. She uses $\frac{2}{3}$ of the ribbon to make a bow. How many yards of ribbon does Willow use to make a bow? Show your work.

Solution _____

- 8** What is the product of 6 and 9.7?

- Ⓐ 582
- Ⓑ 58.2
- Ⓒ 5.82
- Ⓓ 0.582



UNIT 3 • UNIT ASSESSMENT

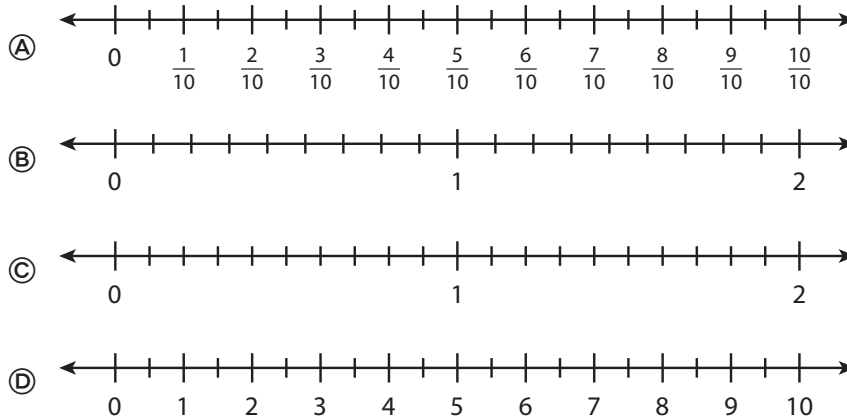
Name: _____

FORM A continued

- 9** Russell wants to ride 2 miles on his bike. Each lap around his block is $\frac{1}{10}$ mile. Russell wants to figure out how many laps he needs to ride.

Part A

Which model could Russell use to find how many laps he needs to ride?

**Part B**

How many laps around the block does Russell need to ride his bike? Write a division equation and a multiplication equation to represent the problem.

Russell needs to ride his bike _____ laps.

- 10** Nika is filling pots with soil to plant some flowers. She estimates that she needs $\frac{1}{5}$ bag of soil for each pot. How many pots can she fill with 3 bags of soil? Show your work.

Solution _____



UNIT 3 • UNIT ASSESSMENT

Name: _____

FORM A continued

- 11** A rectangular cork board is $\frac{2}{3}$ yard wide and $\frac{10}{9}$ yards long.

Complete the equation to find the area of the cork board in square yards.
Write your answers in the blanks.

_____ $\times$ _____ = _____ square yard(s)

- 12** Anne has a $\frac{1}{4}$ -cup scoop that she uses to pour sunflower seeds into bags.
She uses one full scoop for each bag.

Part A

Anne makes this table to show how many bags she can fill from the given amounts of sunflower seeds. Complete Anne's table.
Write your answers in the blanks.

Cups of Sunflower Seeds	Number of Bags
1	_____
2	_____
4	_____

Part B

Anne has 7 cups of sunflower seeds. How many bags can she fill?
Show your work.

Solution _____



UNIT 3 • UNIT ASSESSMENT

Name: _____

FORM A continued

- 13** Amos says that the product $n \times \frac{3}{4}$ is greater than $\frac{3}{4}$ because a product is always greater than its factors. Which of the following values for n show that Amos is incorrect? Choose all the correct answers.

(A) $\frac{9}{8}$

(B) $\frac{5}{5}$

(C) $\frac{3}{8}$

(D) $\frac{3}{2}$

(E) 4

- 14** A chef shares 10 cups of pecans equally among 8 containers. Which expressions show the number of cups of pecans in one container?

Decide if each expression is correct.

Choose *Yes* or *No* for each expression.

	Yes	No
$8 \div 10$	(A)	(B)
$1\frac{2}{8}$	(C)	(D)
$\frac{1}{10} + \frac{1}{10} + \frac{1}{10} + \frac{1}{10} + \frac{1}{10} + \frac{1}{10} + \frac{1}{10} + \frac{1}{10}$	(E)	(F)
$\frac{10}{8}$	(G)	(H)
$10 \times \frac{1}{8}$	(I)	(J)
$10 \div 8$	(K)	(L)

- 15** This model represents a fraction divided by a whole number.

Complete the division equation that the model represents.

Write your answers in the blanks.

_____ $\div$ _____ = _____



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