



Tier 3

Intervention Lessons

5.NF.7a

Learning Target: I will divide a unit fraction by a whole number

Readiness for 6.NS.1: Multiply and divide fractions

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Tier 3 Intervention Planning Guide

Learning Target: I will divide a unit fraction by a whole number

Readiness for multiplying and dividing fractions

Recommended Actions	
Beginning (5 min.)	<ul style="list-style-type: none"> ➤ Review the learning target with the whole group ➤ Ask each student to set a goal for the day based on their previous Quick Check Score ➤ Have each student use a highlighter to plot their goal for the day
Middle (15 min.)	<ul style="list-style-type: none"> ➤ Model solving a word problem – “I do” (<i>Sessions 1, 3 and 6 only</i>) ➤ Guided Practice – “We do” <p>Sessions 1 and 2: Fold fraction squares to divide a unit fraction by a whole number</p> <p>Sessions 3, 4 and 5: Draw on fraction squares to divide a unit fraction by a whole number</p> <p>Sessions 6, 7 and 8: Use multiplication to divide a unit fraction by a whole number</p>
End (10 min.)	<ul style="list-style-type: none"> ➤ Bring the students back together. ➤ Ask students to reflect on their progress towards the learning target <ul style="list-style-type: none"> ○ What did I learn today about dividing a unit fraction by a whole number? ○ How confident do you feel about dividing a unit fraction by a whole number on my own? (Thumbs up, down, or sideways) ➤ Assess each student’s progress using the next Quick Check form ➤ Guide students to self-correct their Quick Check ➤ Guide students to chart their progress in their Growth Chart <ul style="list-style-type: none"> ○ If not using Delta Math lessons, record the activity in the table ➤ Collect each student’s Quick Check and Growth Chart
After Session 6	<ul style="list-style-type: none"> ➤ Differentiation Options: <ul style="list-style-type: none"> ○ Allow students who met the learning goal to work independently while others do the guided practice during the next session ○ Exit students who met the learning goal for a third time ➤ Problem solve with a team to plan additional support for students who do not meet the learning goal within 8 sessions



Session 1: Modeling (I Do)

Learning Target: I will divide a unit fraction by a whole number

Readiness for multiplying and dividing fractions

Gianna has one-half of a pound of ground beef and is planning to make 4 meatballs. If each meatball has the equal amounts of ground beef, how much ground beef will be in each meatball?

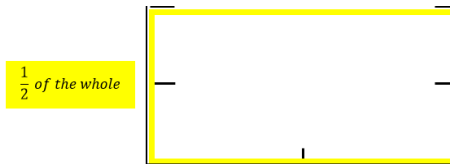
Session 1: Modeling (I Do – Visual Support)

Learning Target: I will divide a unit fraction by a whole number

Readiness for multiplying and dividing fractions

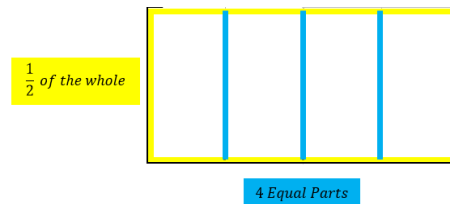
Gianna has one-half of a pound of ground beef and is planning to make 4 meatballs. If each meatball has the equal amounts of ground beef, how much ground beef will be in each meatball?

Fold and outline 1 half of the whole



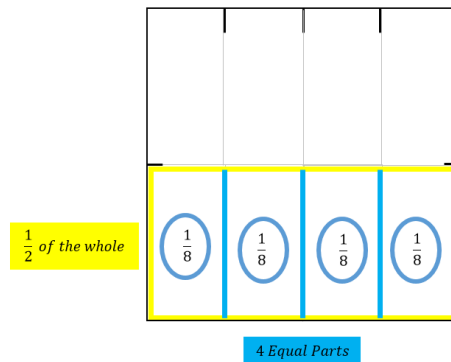
$$\frac{1}{2} \div 4 =$$

Find 1 fourth of the half



$$\frac{1}{2} \div 4 =$$

Unfold and find the part of the whole



$$\frac{1}{2} \div 4 = \frac{1}{8}$$

Session 1: Modeling (I Do - Teacher Notes)

Learning Target: I will divide a unit fraction by a whole number

Readiness for multiplying and dividing fractions

Gianna has one-half of a pound of ground beef and is planning to make 4 meatballs. If each meatball has the equal amounts of ground beef, how much ground beef will be in each meatball?

I am going to think aloud to model solving this problem.

Your job is to watch, listen, think and ask questions.

First, it is important to know what the problem is about.

This problem is about Gianna making meatballs.

Second, I need to determine what I need to find.

I need to find how much ground beef will be in each meatball.

Third, I need to determine what I know.

I know that she has one-half of a pound of ground beef and plans to make 4 meatballs.

Fourth, I need to figure out what I can try.

I am going to try modelling this situation using a square piece of paper.

(Hold up a paper square, use upper right square on **page 10**, and write the multiplication problem.)

I will begin by folding the square in half to represent the half of a pound of ground beef.

(Fold the square in half and outline it using a yellow highlighter. Open the paper to show students that the highlighted area is half of the whole. Fold it back again to show the highlighted half for the next step.)

Since Gianna plans to make 4 meatballs, I will separate this 1 half into 4 equal parts.

(Fold the half into fourths, see drawing on **page 8**, and outline the bottom fourth using blue highlighter.)

Each section represents 1 of the meatballs...we need to find it's fractional part of the whole.

(Open the paper to reveal the whole.)

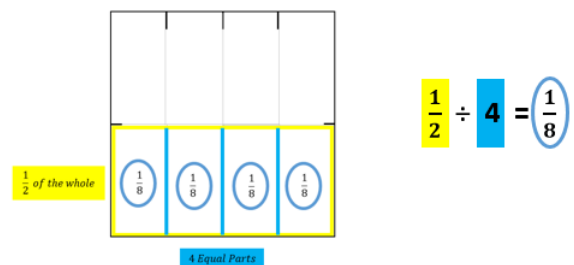
I see that the whole is made up of 8 parts and each part is equal to 1 of the meatballs.

(Trace over the folds with a pencil and count the 8 sections.)

Therefore, each section is equal to 1 eighth of the whole.

(Write $\frac{1}{8}$ inside of the 4 sections of the half and circle each 8th.)

And each meatballs will include 1 eighth of a pound of ground beef.



Last, I need to make sure that my answer makes sense.

I found that each of Gianna's meatballs will include 1 eighth of a pound of ground beef. It makes sense because I represented the half of a pound of ground beef with a paper square and folded it into 4 equal parts to find how much of the whole will be in each meatball.



Squares for Dividing (Set 1)

Directions: Provide each student both sets of squares for the Guided Practice.

Note: The teacher may use the upper right square for the Modeling problem.

(We Do Together, problems 1-4)

<p>Use for Problem 1</p>	<p>Use for Problem 2</p>
<p>Use for Problem 3</p>	<p>Use for Problem 4</p>



Squares for Dividing (Set 2)

(You Do Together, problems 5-8)

<p>Use for Problem 5</p>	<p>Use for Problem 6</p>
<p>Use for Problem 7</p>	<p>Use for Problem 8</p>



Name _____

Date _____

Learning Target: I will divide a unit fraction by a whole number

Session 1: Guided Practice (We Do)

Materials:

- Templates for Squares (2 sheets per student)
- 1 yellow and 1 blue highlighter per student

We Do Together: (Teacher Actions)

- Restate each division problem based on your conceptual understanding.
- Fold and highlight fraction squares to find each answer.

1. $\frac{1}{3} \div 4$	2. $\frac{1}{4} \div 2$
3. $\frac{1}{3} \div 3$	4. $\frac{1}{2} \div 3$

You Do Together: (As a class, or in small groups)

- Students take turns leading to divide unit fractions by whole numbers.

5. $\frac{1}{4} \div 4$	6. $\frac{1}{3} \div 2$
7. $\frac{1}{2} \div 2$	8. $\frac{1}{4} \div 3$

Learning Target: I will divide a unit fraction by a whole number

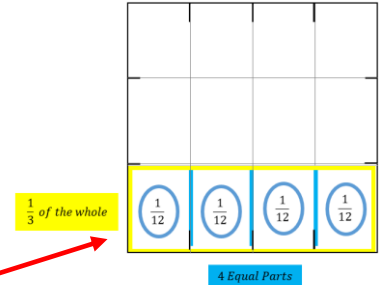
Session 1: Guided Practice (We Do – Teacher Notes)

Materials:

- Templates for Squares (2 sheets per student)
- 1 yellow and 1 blue highlighter per student

We Do Together: (Teacher Actions)

- Restate each division problem based on your conceptual understanding.
- Fold and highlight fraction squares to find each answer.



<p>1.</p> $\frac{1}{3} \div 4 = \frac{1}{12}$ <p style="text-align: center; color: red;"><i>1 third equally divided 4 ways</i></p>	<p>2.</p> $\frac{1}{4} \div 2 = \frac{1}{8}$ <p style="text-align: center; color: red;"><i>1 fourth equally divided 2 ways</i></p>
<p>3.</p> $\frac{1}{3} \div 3 = \frac{1}{9}$ <p style="text-align: center; color: red;"><i>1 third equally divided 3 ways</i></p>	<p>4.</p> $\frac{1}{2} \div 3 = \frac{1}{6}$ <p style="text-align: center; color: red;"><i>1 half equally divided 3 ways</i></p>

You Do Together: (As a class, or in small groups)

- Students take turns leading to divide unit fractions by whole numbers.

<p>5.</p> $\frac{1}{4} \div 4 = \frac{1}{16}$ <p style="text-align: center; color: red;"><i>1 fourth equally divided 4 ways</i></p>	<p>6.</p> $\frac{1}{3} \div 2 = \frac{1}{6}$ <p style="text-align: center; color: red;"><i>1 third equally divided 2 ways</i></p>
<p>7.</p> $\frac{1}{2} \div 2 = \frac{1}{4}$ <p style="text-align: center; color: red;"><i>1 half equally divided 2 ways</i></p>	<p>8.</p> $\frac{1}{4} \div 3 = \frac{1}{12}$ <p style="text-align: center; color: red;"><i>1 fourth equally divided 3 ways</i></p>



Session 1: Self-Reflection

Learning Target: I will divide a unit fraction by a whole number

Briefly discuss student responses:

- What did I learn today about dividing a unit fraction by a whole number?

- How confident do I feel about dividing a unit fraction by a whole number on my own?
(Thumbs up, down, or sideways)



Quick Check - Form A

Name _____ Date _____

Learning Target: I will divide a unit fraction by a whole number.

Directions: Write the answer to each problem. (Work time: 4 minutes)

1.

$$\frac{1}{4} \div 5 = \underline{\hspace{2cm}}$$

2.

$$\frac{1}{8} \div 4 = \underline{\hspace{2cm}}$$

3.

$$\frac{1}{6} \div 2 = \underline{\hspace{2cm}}$$

4.

$$\frac{1}{9} \div 6 = \underline{\hspace{2cm}}$$

5.

$$\frac{1}{3} \div 4 = \underline{\hspace{2cm}}$$

6.

$$\frac{1}{4} \div 8 = \underline{\hspace{2cm}}$$

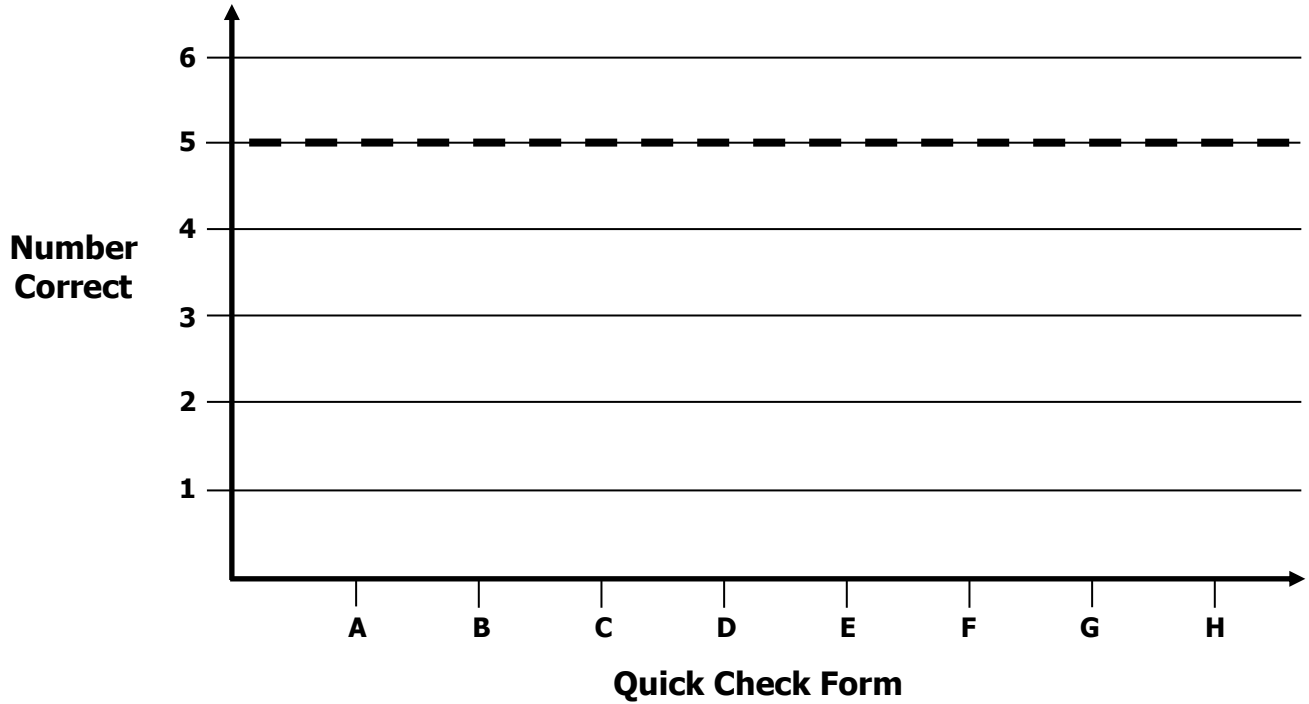


Growth Chart

Name _____ Date _____

Learning Target: I will divide a unit fraction by a whole number.

Goal: 5 out of 6 correct



Intervention	Date	Score
Session 1:		
Session 2:		
Session 3:		
Session 4:		
Session 5:		
Session 6:		
Session 7:		
Session 8:		

Learning Target: I will divide a unit fraction by a whole number

Session 2: Guided Practice (We Do)

Materials:

- Templates for Squares (2 sheets per student)
- 1 yellow and 1 blue highlighter per student

We Do Together: (Teacher Actions)

- Restate each division problem based on your conceptual understanding.
- Fold and highlight fraction squares to find each answer.

<p>1.</p> $\frac{1}{4} \div 4$	<p>2.</p> $\frac{1}{3} \div 2$
<p>3.</p> $\frac{1}{2} \div 2$	<p>4.</p> $\frac{1}{4} \div 3$

You Do Together: (As a class, or in small groups)

- Students take turns leading to divide unit fractions by whole numbers.

<p>5.</p> $\frac{1}{3} \div 4$	<p>6.</p> $\frac{1}{4} \div 2$
<p>7.</p> $\frac{1}{3} \div 3$	<p>8.</p> $\frac{1}{2} \div 3$



Squares for Dividing (Set 1)

Directions: Provide each student both sets of squares for the Guided Practice.

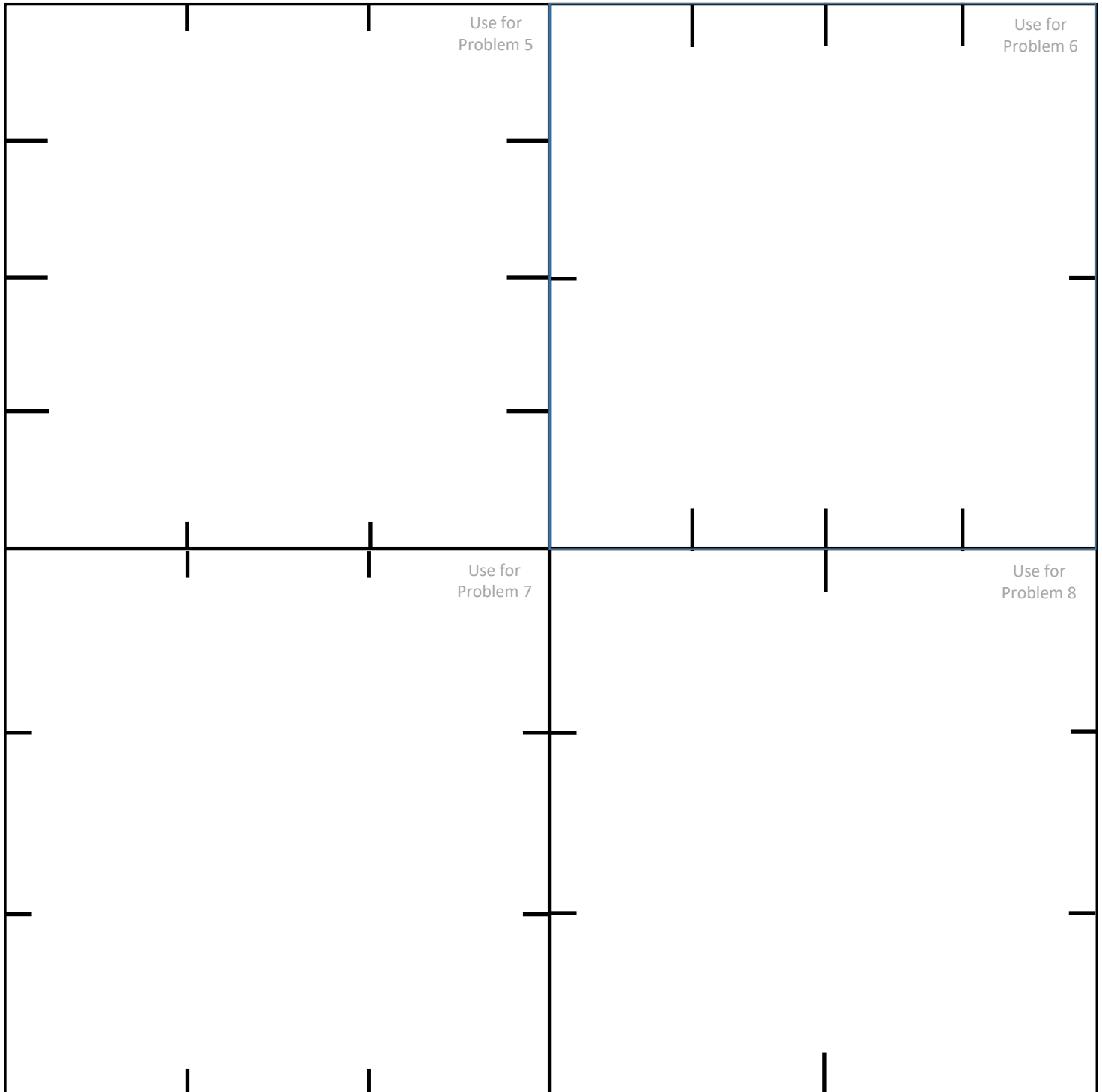
(You Do Together, problems 1-4)

<p>Use for Problem 1</p>	<p>Use for Problem 2</p>
<p>Use for Problem 3</p>	<p>Use for Problem 4</p>



Squares for Dividing (Set 2)

(We Do Together, problems 5-8)





Session 2: Self-Reflection

Learning Target: I will divide a unit fraction by a whole number

Briefly discuss student responses:

- What did I learn today about dividing a unit fraction by a whole number?

- How confident do I feel about dividing a unit fraction by a whole number on my own?
(Thumbs up, down, or sideways)



Quick Check - Form B

Name _____ Date _____

Learning Target: I will divide a unit fraction by a whole number.

Directions: Write the answer to each problem. (Work time: 4 minutes)

1.

$$\frac{1}{4} \div 3 = \underline{\hspace{2cm}}$$

2.

$$\frac{1}{6} \div 4 = \underline{\hspace{2cm}}$$

3.

$$\frac{1}{5} \div 7 = \underline{\hspace{2cm}}$$

4.

$$\frac{1}{10} \div 5 = \underline{\hspace{2cm}}$$

5.

$$\frac{1}{4} \div 2 = \underline{\hspace{2cm}}$$

6.

$$\frac{1}{8} \div 4 = \underline{\hspace{2cm}}$$

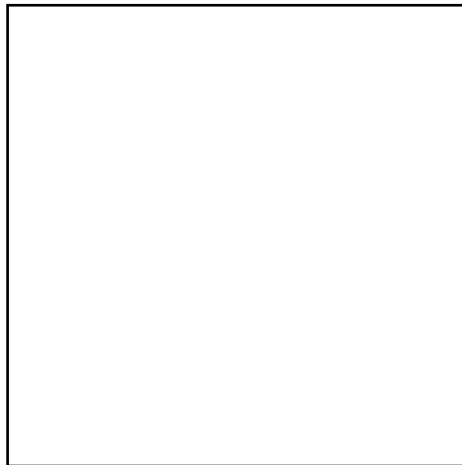


Session 3: Modeling (I Do)

Learning Target: I will divide a unit fraction by a whole number

Readiness for multiplying and dividing fractions

Gianna loves to exercise and frequently eats almonds for extra protein. Her dad gave her a one-third pound bag of almonds. She ate equal amounts each hour during a 6 hour time interval. If she ate all of the almonds during this 6 hour time interval, how many almonds did she eat each hour?



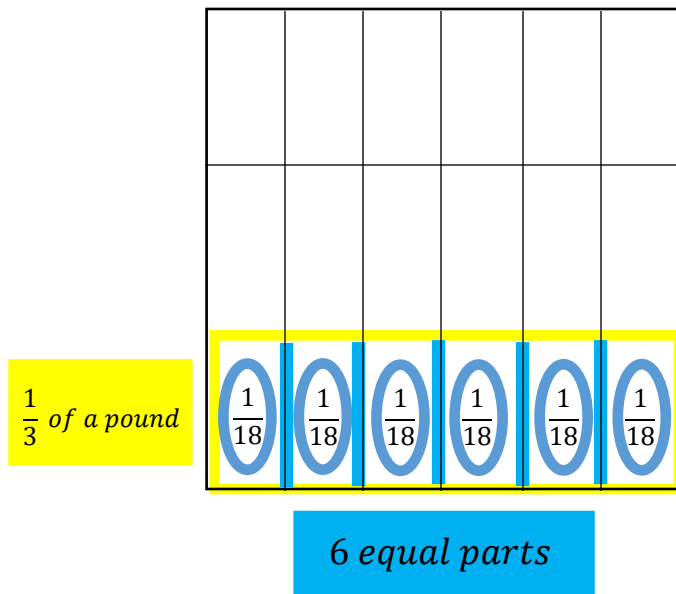
Session 3: Modeling (I Do – Visual Support)

Learning Target: I will divide a unit fraction by a whole number

Readiness for multiplying and dividing fractions

1 Pound of Almonds

$$\frac{1}{3} \div 6 = \frac{1}{18}$$



Session 3: Modeling (I Do - Teacher Notes)

Learning Target: I will divide a unit fraction by a whole number

Readiness for multiplying and dividing fractions

Gianna loves to excersize and frequently eats almonds for extra protien. Her dad gave her a one-third pound bag of almonds. She ate equal amounts each hour during a 6 hour time interval. If she ate all of the almonds during this 6 hour time interval, how many almonds did she eat each hour?

I am going to think aloud to model solving this problem.

Your job is to watch, listen, think and ask questions.

First, it is important to know what the problem is about.

This problem is about Gianna eating almonds.

Second, I need to determine what I need to find.

I need to find how much she ate each hour.

Third, I need to determine what I know.

I know that she started with a one-third pound bag of almonds and she ate equal amounts each hour during a 6 hour time interval.

Fourth, I need to figure out what I can try.

I am going to try using an area drawing to find the part of the whole that she ate each hour.

(Write the division problem above the square.)

I will begin by representing 1 third of a pound.

(Use the guide for drawing fractions and draw lines separating the 3 thirds, outline the bottom third with a yellow highlighter and label it.)

1 Pound of Almonds

$$\frac{1}{3} \div 6 = \frac{1}{18}$$

Now I need to separate this third into 6 equal parts for each hour that she ate.

(Use the guide for drawing fractions and draw 5 lines with a blue highlighter that separate the third into 6 equal parts and label it.)

To see what part of the whole each section equals, I will extend the vertical lines.

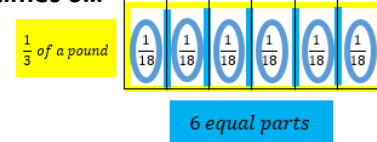
(Extend the vertical lines with a pencil.)

Since the whole is made up of 18 equal parts...I can count each part...or multiply 3 times 6...

(Point with your pencil to show both techniques.)

then each part is equal to 1 eighteenth.

(Write " $\frac{1}{18}$ " and circle the fractions in the 6 sections at the bottom.)



Last, I need to make sure that my answer makes sense.

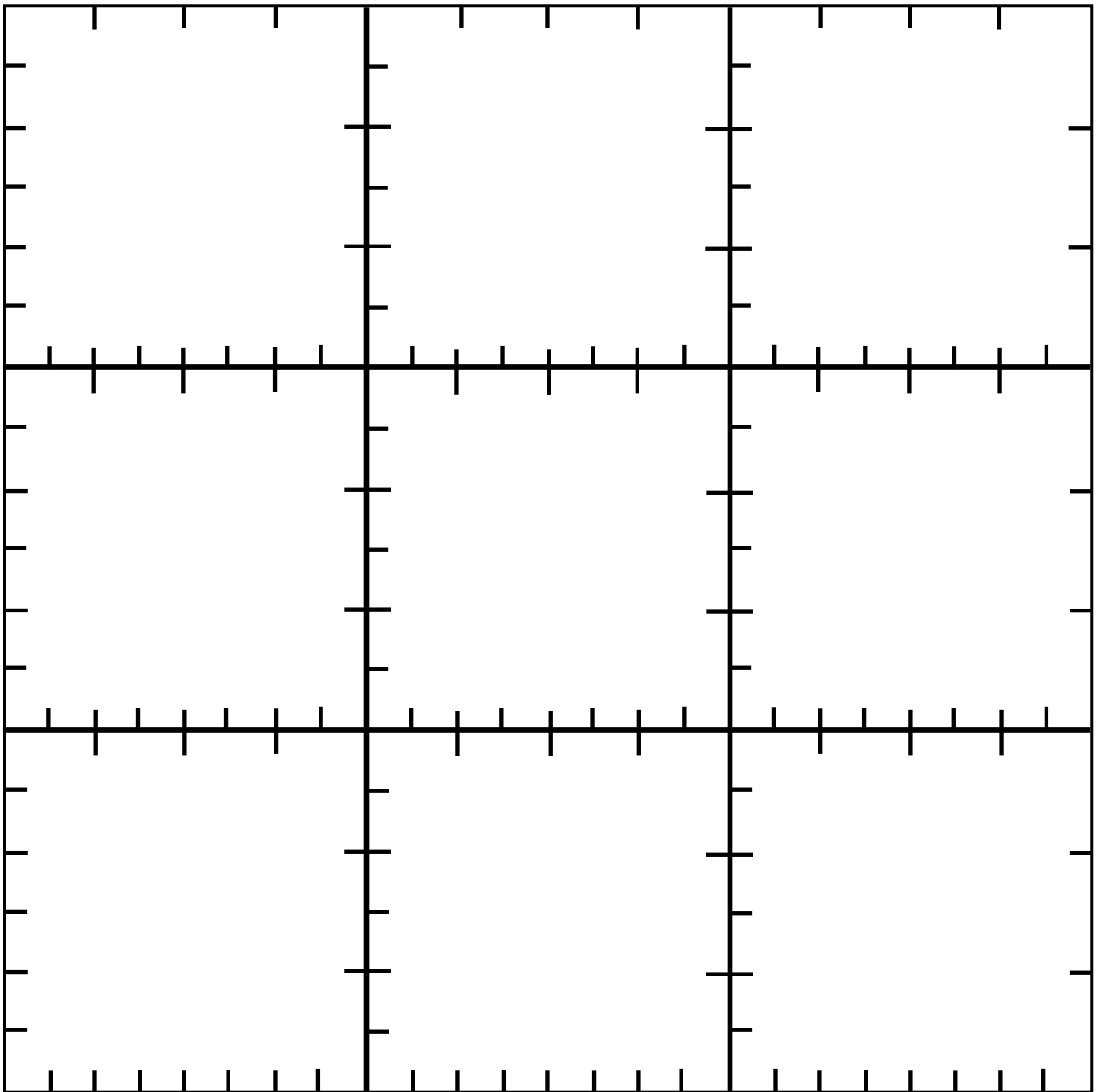
I found that Gianna ate 1 eighteenth of a pound of almonds each hour for 6 hours. It makes sense because I represented the fractional amount that she started with and separated it into 6 equal parts to find how much of the whole each part was equal to.



Guides for Drawing Fractions

Directions: Copy on cardstock and cut out 1 square per student.

Note: The sides of each square provide a guide to draw halves, thirds, fourths, sixths and eighths.
Rotate the square to use the side required for each problem.



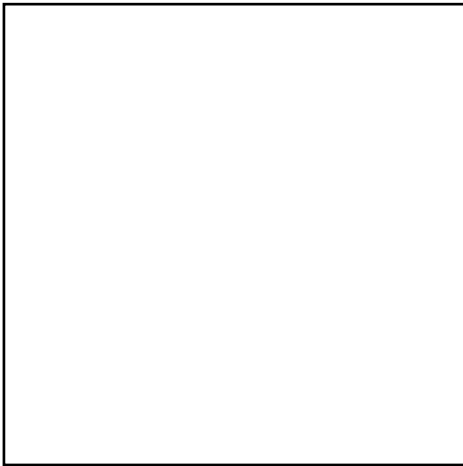
Learning Target: I will divide a unit fraction by a whole number

Session 3: Guided Practice (We Do)

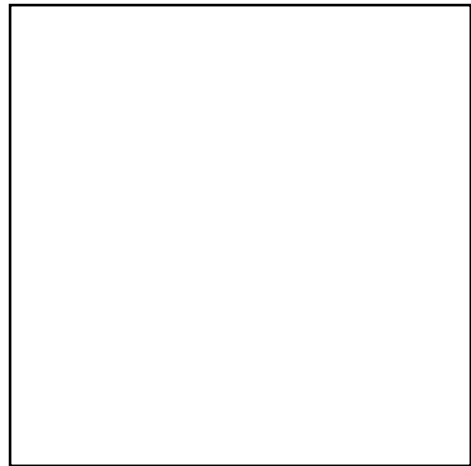
We Do Together: (Teacher Actions)

- Restate each division problem based on your conceptual understanding.
Example: 1 fourth equally divided 2 ways
- Use the square guide to help you draw each problem.

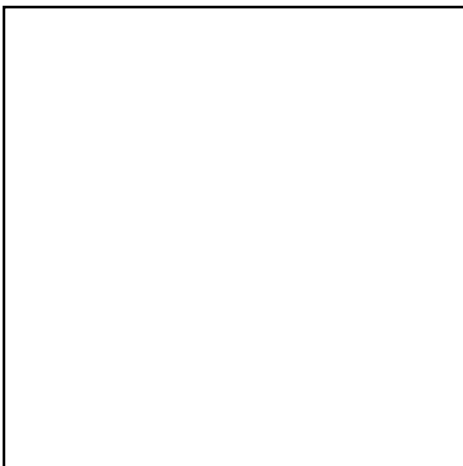
1. $\frac{1}{4} \div 2 =$ _____



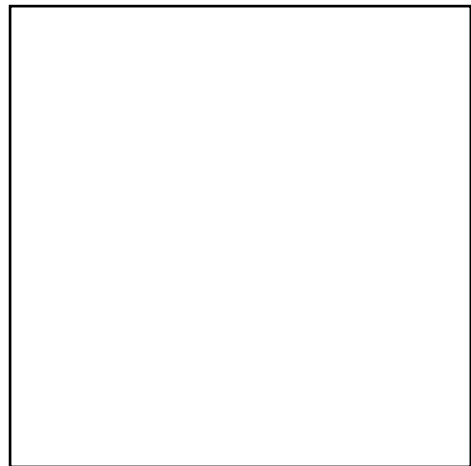
2. $\frac{1}{6} \div 3 =$ _____



3. $\frac{1}{3} \div 4 =$ _____



4. $\frac{1}{8} \div 6 =$ _____



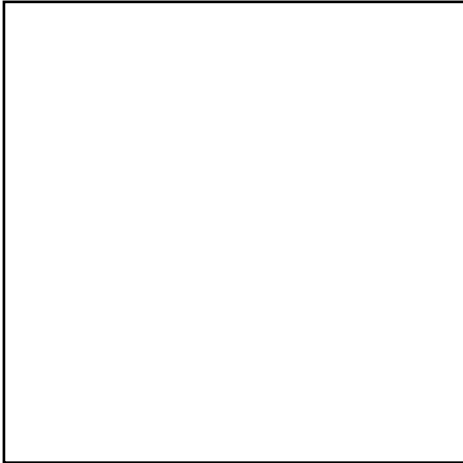
Learning Target: I will divide a unit fraction by a whole number

Session 3: Guided Practice (We Do - Continued)

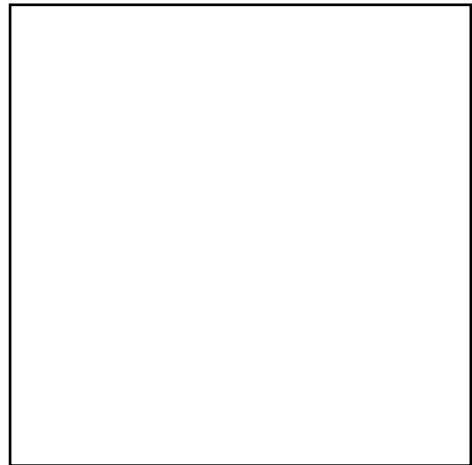
You Do Together: (As a class, or in small groups)

- Students take turns leading to divide unit fractions by whole numbers.

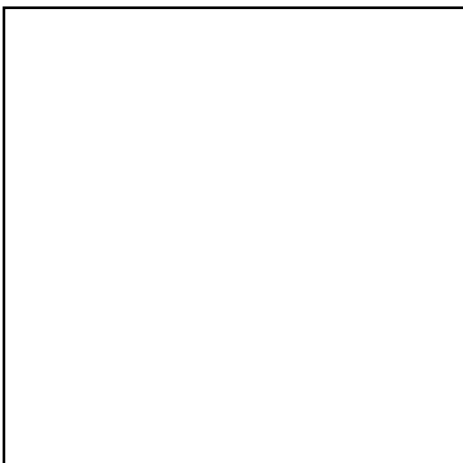
5. $\frac{1}{3} \div 6 =$ _____



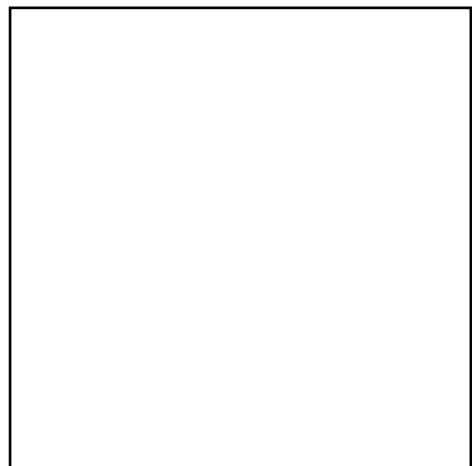
6. $\frac{1}{2} \div 3 =$ _____



7. $\frac{1}{4} \div 8 =$ _____



8. $\frac{1}{8} \div 2 =$ _____



Learning Target: I will divide a unit fraction by a whole number

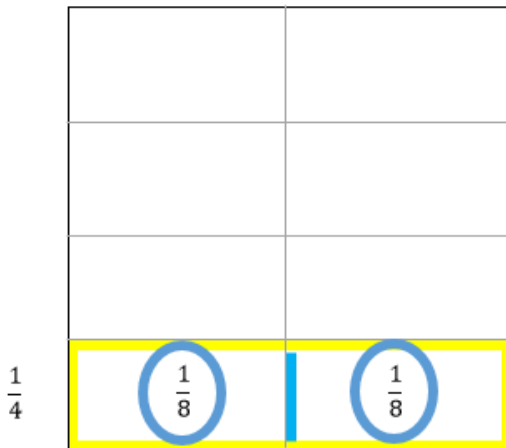
Session 3: Guided Practice (We Do – Teacher Notes)

We Do Together: (Teacher Actions)

- Restate each division problem based on your conceptual understanding.
Example: 1 fourth equally divided 2 ways?
- Use the square guide to help you draw each problem.

1. $\frac{1}{4} \div 2 = \frac{1}{8}$

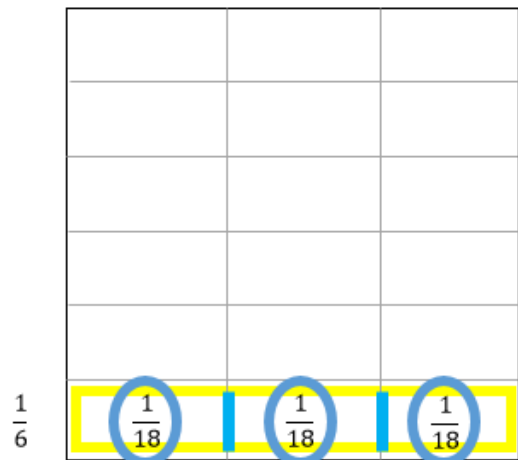
1 fourth equally divided 2 ways



2 equal parts

2. $\frac{1}{6} \div 3 = \frac{1}{18}$

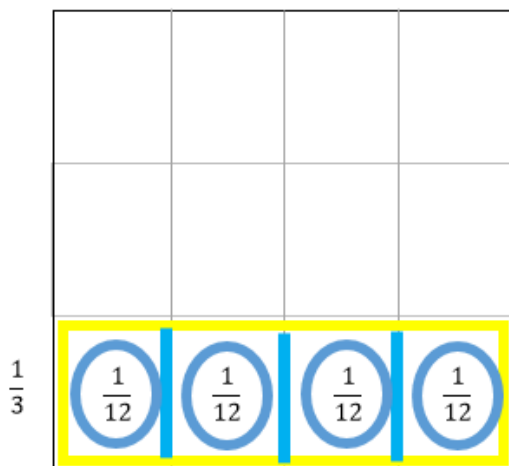
1 sixth equally divided 3 ways



3 equal parts

3. $\frac{1}{3} \div 4 = \frac{1}{12}$

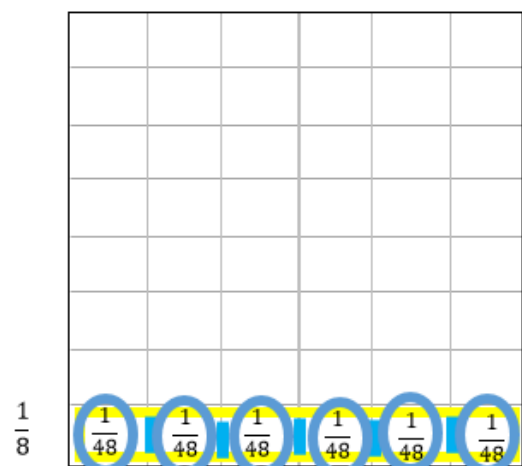
1 third equally divided 4 ways



4 equal parts

4. $\frac{1}{8} \div 6 = \frac{1}{48}$

1 eighth equally divided 6 ways



6 equal parts



Session 3: Self-Reflection

Learning Target: I will divide a unit fraction by a whole number

Briefly discuss student responses:

- What did I learn today about dividing a unit fraction by a whole number?

- How confident do I feel about dividing a unit fraction by a whole number on my own?
(Thumbs up, down, or sideways)



Quick Check - Form C

Name _____ Date _____

Learning Target: I will divide a unit fraction by a whole number.

Directions: Write the answer to each problem. (Work time: 4 minutes)

1.

$$\frac{1}{5} \div 2 = \underline{\hspace{2cm}}$$

2.

$$\frac{1}{4} \div 5 = \underline{\hspace{2cm}}$$

3.

$$\frac{1}{7} \div 4 = \underline{\hspace{2cm}}$$

4.

$$\frac{1}{10} \div 2 = \underline{\hspace{2cm}}$$

5.

$$\frac{1}{5} \div 10 = \underline{\hspace{2cm}}$$

6.

$$\frac{1}{9} \div 3 = \underline{\hspace{2cm}}$$

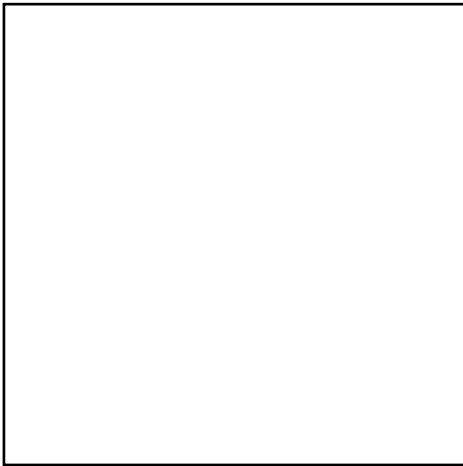
Learning Target: I will divide a unit fraction by a whole number

Session 4: Guided Practice (We Do)

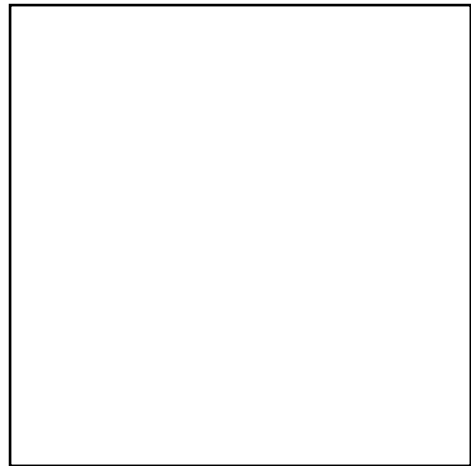
We Do Together: (Teacher Actions)

- Restate each division problem based on your conceptual understanding.
Example: 1 fourth equally divided 2 ways
- Use the square guide to help you draw each problem.

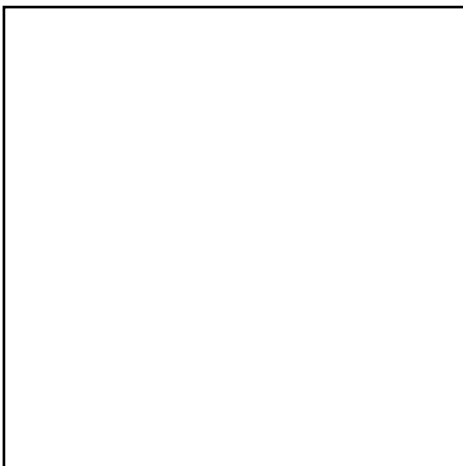
1. $\frac{1}{4} \div 3 =$ _____



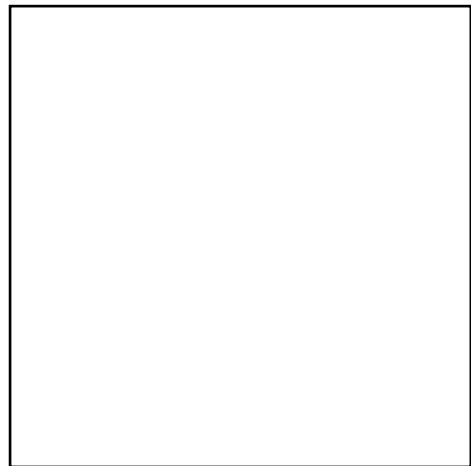
2. $\frac{1}{6} \div 2 =$ _____



3. $\frac{1}{3} \div 6 =$ _____



4. $\frac{1}{8} \div 4 =$ _____



Learning Target: I will divide a unit fraction by a whole number

Session 4: Guided Practice (We Do - Continued)

You Do Together: (As a class, or in small groups)

- Students take turns leading to divide unit fractions by whole numbers.

5. $\frac{1}{3} \div 4 =$ _____

6. $\frac{1}{2} \div 5 =$ _____

7. $\frac{1}{4} \div 6 =$ _____

8. $\frac{1}{8} \div 3 =$ _____



Session 4: Self-Reflection

Learning Target: I will divide a unit fraction by a whole number

Briefly discuss student responses:

- What did I learn today about dividing a unit fraction by a whole number?

- How confident do I feel about dividing a unit fraction by a whole number on my own?
(Thumbs up, down, or sideways)



Quick Check - Form D

Name _____ Date _____

Learning Target: I will divide a unit fraction by a whole number.

Directions: Write the answer to each problem. (Work time: 4 minutes)

1.

$$\frac{1}{2} \div 6 = \underline{\hspace{2cm}}$$

2.

$$\frac{1}{5} \div 3 = \underline{\hspace{2cm}}$$

3.

$$\frac{1}{8} \div 9 = \underline{\hspace{2cm}}$$

4.

$$\frac{1}{6} \div 8 = \underline{\hspace{2cm}}$$

5.

$$\frac{1}{4} \div 6 = \underline{\hspace{2cm}}$$

6.

$$\frac{1}{2} \div 10 = \underline{\hspace{2cm}}$$

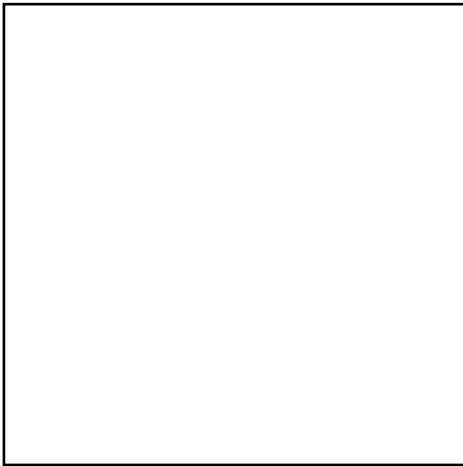
Learning Target: I will divide a unit fraction by a whole number

Session 5: Guided Practice (We Do)

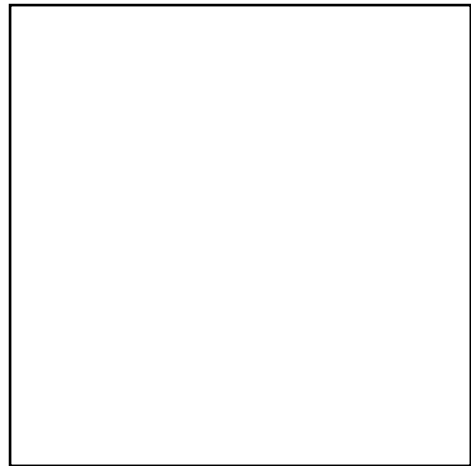
We Do Together: (Teacher Actions)

- Restate each division problem based on your conceptual understanding.
Example: 1 fourth equally divided 2 ways
- Use the square guide to help you draw each problem.

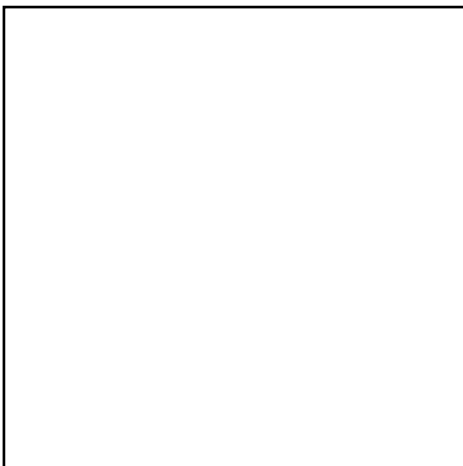
1. $\frac{1}{3} \div 2 =$ _____



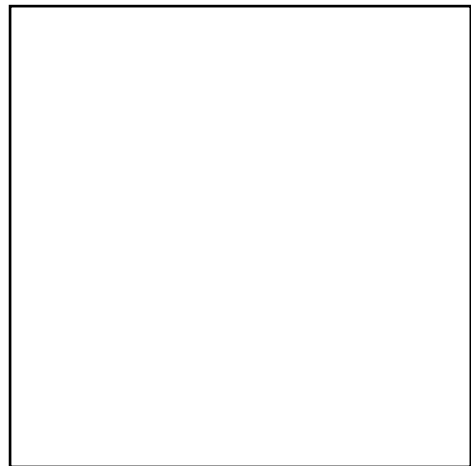
2. $\frac{1}{8} \div 3 =$ _____



3. $\frac{1}{6} \div 4 =$ _____



4. $\frac{1}{2} \div 6 =$ _____



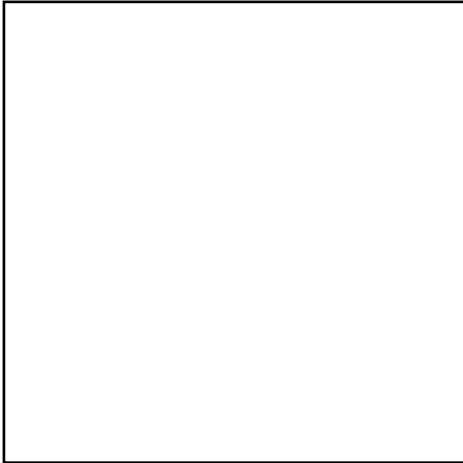
Learning Target: I will divide a unit fraction by a whole number

Session 5: Guided Practice (We Do - Continued)

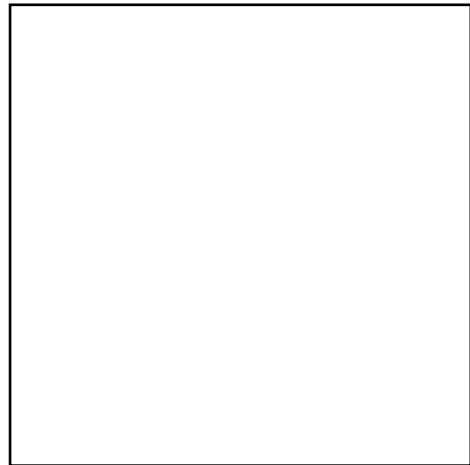
You Do Together: (As a class, or in small groups)

- Students take turns leading to divide unit fractions by whole numbers.

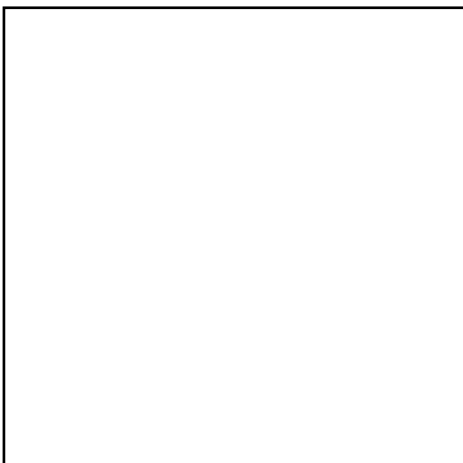
5. $\frac{1}{8} \div 6 =$ _____



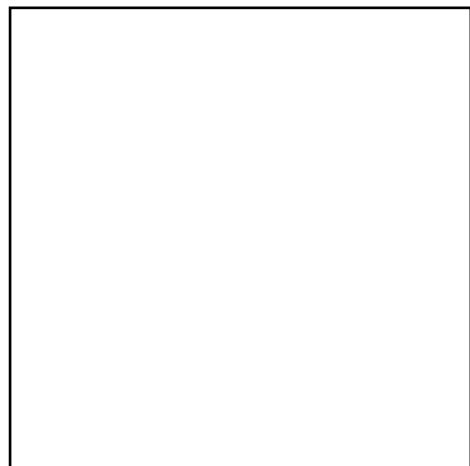
6. $\frac{1}{4} \div 3 =$ _____



7. $\frac{1}{3} \div 8 =$ _____



8. $\frac{1}{6} \div 4 =$ _____





Session 5: Self-Reflection

Learning Target: I will divide a unit fraction by a whole number

Briefly discuss student responses:

- What did I learn today about dividing a unit fraction by a whole number?

- How confident do I feel about dividing a unit fraction by a whole number on my own?
(Thumbs up, down, or sideways)



Quick Check - Form E

Name _____ Date _____

Learning Target: I will divide a unit fraction by a whole number.

Directions: Write the answer to each problem. (Work time: 4 minutes)

1.

$$\frac{1}{4} \div 5 = \underline{\hspace{2cm}}$$

2.

$$\frac{1}{8} \div 4 = \underline{\hspace{2cm}}$$

3.

$$\frac{1}{6} \div 2 = \underline{\hspace{2cm}}$$

4.

$$\frac{1}{9} \div 6 = \underline{\hspace{2cm}}$$

5.

$$\frac{1}{3} \div 4 = \underline{\hspace{2cm}}$$

6.

$$\frac{1}{4} \div 8 = \underline{\hspace{2cm}}$$

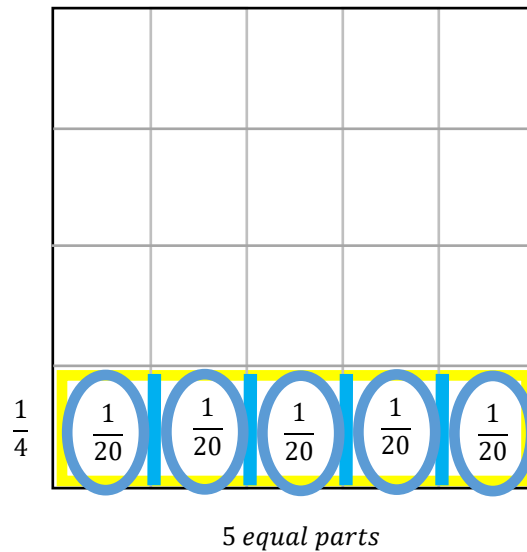
Session 6: Modeling (I Do)

Learning Target: I will divide a unit fraction by a whole number

Readiness for multiplying and dividing fractions

Gianna used an area drawing to find the answer to $\frac{1}{4} \div 5$. Look for structure in her drawing that would help write a multiplication problem that can be used to find the same answer.

$$\frac{1}{4} \div 5 = \frac{1}{20}$$



Session 6: Modeling (I Do – Visual Support)

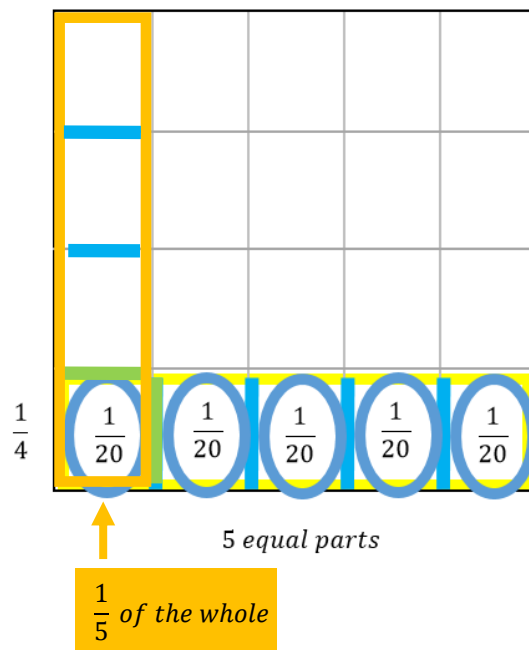
Learning Target: I will divide a unit fraction by a whole number

Readiness for multiplying and dividing fractions

Gianna used an area drawing to find the answer to $\frac{1}{4} \div 5$. Look for structure in her drawing that would help write a multiplication problem that can be used to find the same answer.

$$\frac{1}{4} \div 5 = \frac{1}{20}$$

$$\frac{1}{4} \times \frac{1}{5} = \frac{1 \times 1}{4 \times 5} = \frac{1}{20}$$



Session 6: Modeling (I Do - Teacher Notes)

Learning Target: I will divide a unit fraction by a whole number

Readiness for multiplying and dividing fractions

Gianna used an area drawing to find the answer to $\frac{1}{4} \div 5$. Look for structure in her drawing that would help write a multiplication problem that can be used to find the same answer.

I am going to think aloud to model solving this problem.

Your job is to watch, listen, think and ask questions.

First, it is important to know what the problem is about.

This problem is about Gianna using an area drawing to divide a unit fraction by a whole number.

Second, I need to determine what I need to find.

I need to write a multiplication problem that I can use to find the same answer.

Third, I need to determine what I know.

I know that the drawing shows 1 fourth separated into 5 equal parts and the answer is 1 twentieth.

Fourth, I need to figure out what I can try.

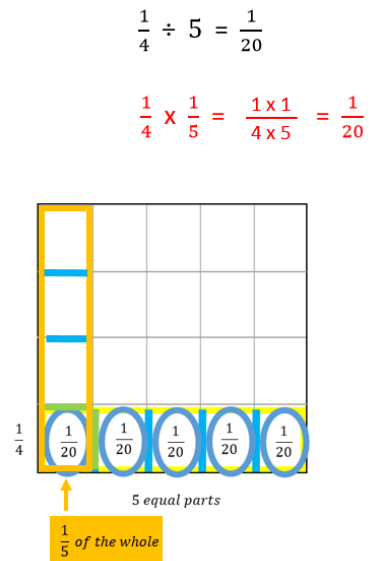
I am going to try looking for a multiplication problem in the drawing.

The first vertical section is 1 fifth of the whole.

(Outline the first column of the diagram with orange highlighter and write " $\frac{1}{5}$ of the whole" below it.)

And...1 fourth of the fifth is 1 twentieth.

(Draw 3 lines with blue highlighter to separate the fifth into 4 equal parts.)



Can you see the multiplication problem 1 fourth of 1 fifth?

(Write the multiplication problem $\frac{1}{4} \times \frac{1}{5}$ below the original division problem.)

When I multiply fractions without a drawing, I multiply the denominators to find the size of each part...

4 times 5...equals 20.

(Write " $= \frac{1}{4 \times 5} = \frac{1}{20}$ ".)

Then I multiply the numerators to see how many parts I have...1 times 1...equals 1.

(Write the numerators "1 x 1" and "1".)

Last, I need to make sure that my answer makes sense.

I found that using multiplication by 1 over the given whole number will result in the same answer to the division problem. It makes sense because I can see both fractions in the math drawing. Let's see if it works for all of the guided practice problems.

Learning Target: I will divide a unit fraction by a whole number

Session 6: Guided Practice (We Do)

We Do Together: (Teacher Actions)

- Fold your paper to hide the math drawings. Then, multiply to find the answer to each division problem.
- Unfold your paper to check if your answer is correct.

	Divide Using Multiplication	Check Your Work
1. $\frac{1}{4} \div 2 =$		
2. $\frac{1}{6} \div 3 =$		
3. $\frac{1}{3} \div 4 =$		
4. $\frac{1}{8} \div 6 =$		

Learning Target: I will divide a unit fraction by a whole number

Session 6: Guided Practice (We Do - Continued)

You Do Together: (As a class, or in small groups)

- Students take turns leading to divide using multiplication.

	Divide Using Multiplication	Check Your Work
5. $\frac{1}{4} \div 3 =$		
6. $\frac{1}{6} \div 2 =$		
7. $\frac{1}{3} \div 3 =$		
8. $\frac{1}{8} \div 4 =$		

Learning Target: I will divide a unit fraction by a whole number

Session 6: Guided Practice (We Do – Teacher Notes)

We Do Together: (Teacher Actions)

- Fold your paper to hide the math drawings. Then, multiply to find the answer to each division problem.
- Unfold your paper to check if your answer is correct.

	Divide Using Multiplication	Check Your Work
1. $\frac{1}{4} \div 2 = \frac{1}{8}$	$\frac{1}{4} \times \frac{1}{2} = \frac{1 \times 1}{4 \times 2} = \frac{1}{8}$	
2. $\frac{1}{6} \div 3 = \frac{1}{18}$	$\frac{1}{6} \times \frac{1}{3} = \frac{1 \times 1}{6 \times 3} = \frac{1}{18}$	
3. $\frac{1}{3} \div 4 = \frac{1}{12}$	$\frac{1}{3} \times \frac{1}{4} = \frac{1 \times 1}{3 \times 4} = \frac{1}{12}$	
4. $\frac{1}{8} \div 6 = \frac{1}{48}$	$\frac{1}{8} \times \frac{1}{6} = \frac{1 \times 1}{8 \times 6} = \frac{1}{48}$	



Session 6: Self-Reflection

Learning Target: I will divide a unit fraction by a whole number

Briefly discuss student responses:

- What did I learn today about dividing a unit fraction by a whole number?

- How confident do I feel about dividing a unit fraction by a whole number on my own?
(Thumbs up, down, or sideways)



Quick Check - Form F

Name _____ Date _____

Learning Target: I will divide a unit fraction by a whole number.

Directions: Write the answer to each problem. (Work time: 4 minutes)

1.

$$\frac{1}{4} \div 3 = \underline{\hspace{2cm}}$$

2.

$$\frac{1}{6} \div 4 = \underline{\hspace{2cm}}$$

3.

$$\frac{1}{5} \div 7 = \underline{\hspace{2cm}}$$

4.

$$\frac{1}{10} \div 5 = \underline{\hspace{2cm}}$$

5.

$$\frac{1}{4} \div 2 = \underline{\hspace{2cm}}$$

6.

$$\frac{1}{8} \div 4 = \underline{\hspace{2cm}}$$

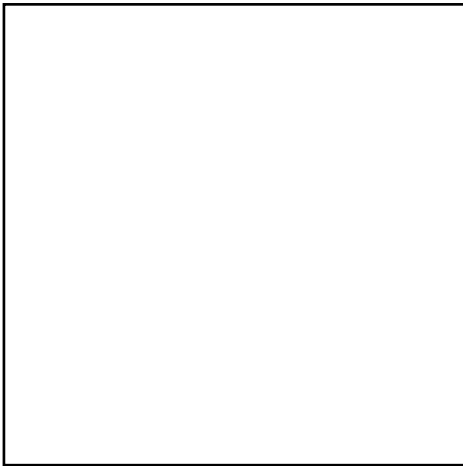
Learning Target: I will divide a unit fraction by a whole number

Session 7: Guided Practice (We Do)

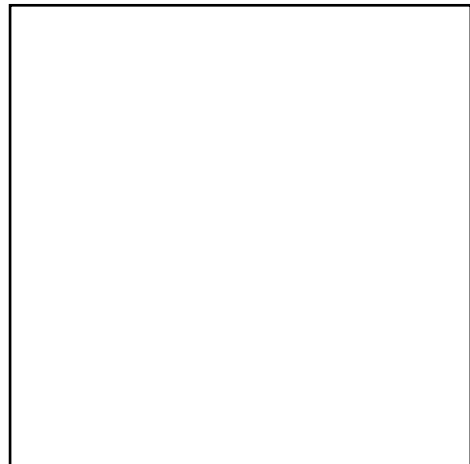
We Do Together: (Teacher Actions)

- Restate each fraction multiplication problem based on your conceptual understanding.
Example: 1 third equally divided 2 ways?
- Multiply to find the answer to each division problem. Then, sketch the division problem to check your answer.

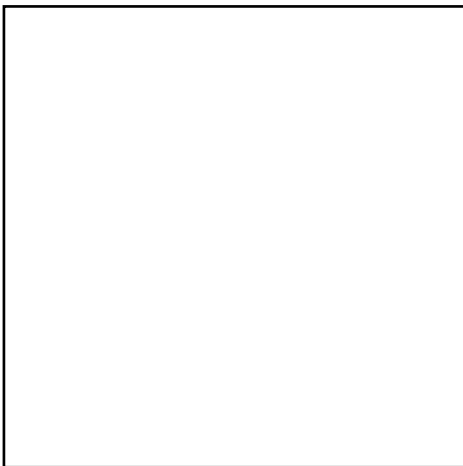
1. $\frac{1}{3} \div 4 =$ _____



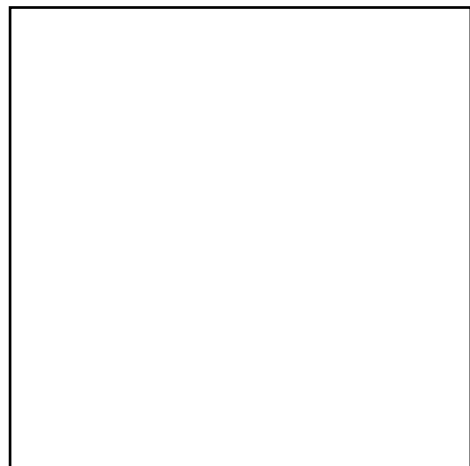
2. $\frac{1}{8} \div 2 =$ _____



3. $\frac{1}{6} \div 3 =$ _____



4. $\frac{1}{2} \div 5 =$ _____



Learning Target: I will divide a unit fraction by a whole number

Session 7: Guided Practice (We Do - Continued)

You Do Together: (As a class, or in small groups)

- Students take turns leading to restating each division problem. Then, multiply to find the answer to each division problem and sketch the original problem to check your answer.

5. $\frac{1}{8} \div 3 =$ _____

6. $\frac{1}{4} \div 4 =$ _____

7. $\frac{1}{3} \div 5 =$ _____

8. $\frac{1}{6} \div 3 =$ _____



Session 7: Self-Reflection

Learning Target: I will divide a unit fraction by a whole number

Briefly discuss student responses:

- What did I learn today about dividing a unit fraction by a whole number?

- How confident do I feel about dividing a unit fraction by a whole number on my own?
(Thumbs up, down, or sideways)



Quick Check - Form G

Name _____ Date _____

Learning Target: I will divide a unit fraction by a whole number.

Directions: Write the answer to each problem. (Work time: 4 minutes)

1.

$$\frac{1}{5} \div 2 = \underline{\hspace{2cm}}$$

2.

$$\frac{1}{4} \div 5 = \underline{\hspace{2cm}}$$

3.

$$\frac{1}{7} \div 4 = \underline{\hspace{2cm}}$$

4.

$$\frac{1}{10} \div 2 = \underline{\hspace{2cm}}$$

5.

$$\frac{1}{5} \div 10 = \underline{\hspace{2cm}}$$

6.

$$\frac{1}{9} \div 3 = \underline{\hspace{2cm}}$$

Learning Target: I will divide a unit fraction by a whole number

Session 8: Guided Practice (We Do)

We Do Together: (Teacher Actions)

- Restate each fraction multiplication problem based on your conceptual understanding.
Example: 1 third equally divided 2 ways?
- Multiply to find the answer to each division problem. Then, sketch the division problem to check your answer.

1. $\frac{1}{4} \div 2 =$ _____

2. $\frac{1}{5} \div 3 =$ _____

3. $\frac{1}{6} \div 4 =$ _____

4. $\frac{1}{7} \div 5 =$ _____

Learning Target: I will divide a unit fraction by a whole number

Session 8: Guided Practice (We Do - Continued)

You Do Together: (As a class, or in small groups)

- Students take turns leading to restating each division problem. Then, multiply to find the answer to each division problem and sketch the original problem to check your answer.

5. $\frac{1}{6} \div 4 =$ _____

6. $\frac{1}{3} \div 5 =$ _____

7. $\frac{1}{8} \div 2 =$ _____

8. $\frac{1}{5} \div 6 =$ _____



Session 8: Self-Reflection

Learning Target: I will divide a unit fraction by a whole number

Briefly discuss student responses:

- What did I learn today about dividing a unit fraction by a whole number?

- How confident do I feel about dividing a unit fraction by a whole number on my own?
(Thumbs up, down, or sideways)



Quick Check - Form H

Name _____ Date _____

Learning Target: I will divide a unit fraction by a whole number.

Directions: Write the answer to each problem. (Work time: 4 minutes)

1.

$$\frac{1}{2} \div 6 = \underline{\hspace{2cm}}$$

2.

$$\frac{1}{5} \div 3 = \underline{\hspace{2cm}}$$

3.

$$\frac{1}{8} \div 9 = \underline{\hspace{2cm}}$$

4.

$$\frac{1}{6} \div 8 = \underline{\hspace{2cm}}$$

5.

$$\frac{1}{4} \div 6 = \underline{\hspace{2cm}}$$

6.

$$\frac{1}{2} \div 10 = \underline{\hspace{2cm}}$$



Independent Practice (You Do)

Learning Target: I will divide a unit fraction by a whole number

Readiness for multiplying and dividing fractions

Title of Game: Play “Division Match-up!”

Number of Players: 2

Objective: To match your answer cards to unknown problem cards.

Materials:

- 1 set of **Problem** and **Answer** cards per group
- 1 recording sheet per player

Set-up:

- Deal all 10 **Problem** cards face down in a row.
- Deal 5 **Answer** cards face up to each player.

Directions:

- **Player 1** goes first
 - Take a card from the row of face down **Problem** cards and turn it face up
 - Write the problem on the recording sheet
- If **Player 1** has the **Answer** card, place it face up on top of the **Problem** card, take both cards and say:
“The answer to ___ is equal to ___.”
- If **Player 1** does not have the answer to the **Problem** card, turn the **Problem** card back over.
- **Players 1 and 2** alternate turns. The **winner** is the first player to match all 5 of their cards.



Names _____

Date _____

Learning Target: I will divide a unit fraction by a whole number

Independent Practice: Division Match-up!

(Recording Sheet)



Problem Cards (Set A₁ and A₂)

Storage Suggestions: Copy the **Problem (Set A)** cards and **Answer (Set A)** cards in two different colors.
Store 1 set of each in a sealable bag for each pair of students.

Set A ₁	$\frac{1}{2} \div 2$ Set A ₁	$\frac{1}{2} \div 3$ Set A ₁	$\frac{1}{2} \div 4$ Set A ₁	$\frac{1}{2} \div 5$ Set A ₁
	$\frac{1}{3} \div 6$ Set A ₁	$\frac{1}{3} \div 3$ Set A ₁	$\frac{1}{3} \div 4$ Set A ₁	$\frac{1}{3} \div 5$ Set A ₁
	$\frac{1}{4} \div 6$ Set A ₁	$\frac{1}{4} \div 7$ Set A ₁		
Set A ₂	$\frac{1}{2} \div 2$ Set A ₂	$\frac{1}{2} \div 3$ Set A ₂	$\frac{1}{2} \div 4$ Set A ₂	$\frac{1}{2} \div 5$ Set A ₂
	$\frac{1}{3} \div 6$ Set A ₂	$\frac{1}{3} \div 3$ Set A ₂	$\frac{1}{3} \div 4$ Set A ₂	$\frac{1}{3} \div 5$ Set A ₂
	$\frac{1}{4} \div 6$ Set A ₂	$\frac{1}{4} \div 7$ Set A ₂		



Answer Cards (Set A₁ and A₂)

Storage Suggestions: Copy the **Problem (Set A)** cards and **Answer (Set A)** cards in two different colors.
Store 1 set of each in a sealable bag for each pair of students.

Set A ₁	$\frac{1}{4}$ Set A ₁	$\frac{1}{6}$ Set A ₁	$\frac{1}{8}$ Set A ₁	$\frac{1}{10}$ Set A ₁
	$\frac{1}{18}$ Set A ₁	$\frac{1}{9}$ Set A ₁	$\frac{1}{12}$ Set A ₁	$\frac{1}{15}$ Set A ₁
	$\frac{1}{24}$ Set A ₁	$\frac{1}{28}$ Set A ₁		
Set A ₂	$\frac{1}{4}$ Set A ₂	$\frac{1}{6}$ Set A ₂	$\frac{1}{8}$ Set A ₂	$\frac{1}{10}$ Set A ₂
	$\frac{1}{18}$ Set A ₂	$\frac{1}{9}$ Set A ₂	$\frac{1}{12}$ Set A ₂	$\frac{1}{15}$ Set A ₂
	$\frac{1}{24}$ Set A ₂	$\frac{1}{28}$ Set A ₂		



Problem Cards (Set B₁ and B₂)

Storage Suggestions: Copy the **Problem (Set B)** cards and **Answer (Set B)** cards in two different colors.

Store 1 set of each in a sealable bag for each pair of students.

Set B ₁	$\frac{1}{6} \div 2$ Set B ₁	$\frac{1}{6} \div 3$ Set B ₁	$\frac{1}{6} \div 4$ Set B ₁	$\frac{1}{7} \div 2$ Set B ₁
	$\frac{1}{7} \div 3$ Set B ₁	$\frac{1}{7} \div 4$ Set B ₁	$\frac{1}{8} \div 2$ Set B ₁	$\frac{1}{8} \div 5$ Set B ₁
	$\frac{1}{8} \div 4$ Set B ₁	$\frac{1}{9} \div 3$ Set B ₁		
Set B ₂	$\frac{1}{6} \div 2$ Set B ₂	$\frac{1}{6} \div 3$ Set B ₂	$\frac{1}{6} \div 4$ Set B ₂	$\frac{1}{7} \div 2$ Set B ₂
	$\frac{1}{7} \div 3$ Set B ₂	$\frac{1}{7} \div 4$ Set B ₂	$\frac{1}{8} \div 2$ Set B ₂	$\frac{1}{8} \div 5$ Set B ₂
	$\frac{1}{8} \div 4$ Set B ₂	$\frac{1}{9} \div 3$ Set B ₂		



Answer Cards (Set B₁ and B₂)

Storage Suggestions: Copy the **Problem (Set B)** cards and **Answer (Set B)** cards in two different colors.
Store 1 set of each in a sealable bag for each pair of students.

Set B ₁	$\frac{1}{12}$ Set B ₁	$\frac{1}{18}$ Set B ₁	$\frac{1}{24}$ Set B ₁	$\frac{1}{14}$ Set B ₁
	$\frac{1}{21}$ Set B ₁	$\frac{1}{28}$ Set B ₁	$\frac{1}{16}$ Set B ₁	$\frac{1}{40}$ Set B ₁
	$\frac{1}{32}$ Set B ₁	$\frac{1}{27}$ Set B ₁		
Set B ₂	$\frac{1}{12}$ Set B ₂	$\frac{1}{18}$ Set B ₂	$\frac{1}{24}$ Set B ₂	$\frac{1}{14}$ Set B ₂
	$\frac{1}{21}$ Set B ₂	$\frac{1}{28}$ Set B ₂	$\frac{1}{16}$ Set B ₂	$\frac{1}{40}$ Set B ₂
	$\frac{1}{32}$ Set B ₂	$\frac{1}{27}$ Set B ₂		



Problem Cards (Set C₁ and C₂)

Storage Suggestions: Copy the **Problem (Set C)** cards and **Answer (Set C)** cards in two different colors.

Store 1 set of each in a sealable bag for each pair of students.

Set C ₁	$\frac{1}{6} \div 6$ Set C ₁	$\frac{1}{7} \div 7$ Set C ₁	$\frac{1}{8} \div 8$ Set C ₁	$\frac{1}{9} \div 6$ Set C ₁
	$\frac{1}{6} \div 7$ Set C ₁	$\frac{1}{7} \div 8$ Set C ₁	$\frac{1}{8} \div 8$ Set C ₁	$\frac{1}{9} \div 9$ Set C ₁
	$\frac{1}{7} \div 9$ Set C ₁	$\frac{1}{8} \div 9$ Set C ₁		
Set C ₂	$\frac{1}{6} \div 6$ Set C ₂	$\frac{1}{7} \div 7$ Set C ₂	$\frac{1}{8} \div 8$ Set C ₂	$\frac{1}{9} \div 6$ Set C ₂
	$\frac{1}{6} \div 7$ Set C ₂	$\frac{1}{7} \div 8$ Set C ₂	$\frac{1}{8} \div 8$ Set C ₂	$\frac{1}{9} \div 9$ Set C ₂
	$\frac{1}{7} \div 9$ Set C ₂	$\frac{1}{8} \div 9$ Set C ₂		



Answer Cards (Set C₁ and C₂)

Storage Suggestions: Copy the **Problem (Set C)** cards and **Answer (Set C)** cards in two different colors.

Store 1 set of each in a sealable bag for each pair of students.

Set C ₁	$\frac{1}{36}$ Set C ₁	$\frac{1}{49}$ Set C ₁	$\frac{1}{48}$ Set C ₁	$\frac{1}{54}$ Set C ₁
	$\frac{1}{42}$ Set C ₁	$\frac{1}{56}$ Set C ₁	$\frac{1}{64}$ Set C ₁	$\frac{1}{81}$ Set C ₁
	$\frac{1}{63}$ Set C ₁	$\frac{1}{72}$ Set C ₁		
Set C ₂	$\frac{1}{36}$ Set C ₂	$\frac{1}{49}$ Set C ₂	$\frac{1}{48}$ Set C ₂	$\frac{1}{54}$ Set C ₂
	$\frac{1}{42}$ Set C ₂	$\frac{1}{56}$ Set C ₂	$\frac{1}{64}$ Set C ₂	$\frac{1}{81}$ Set C ₂
	$\frac{1}{63}$ Set C ₂	$\frac{1}{72}$ Set C ₂		



Questions for Solving Word Problems

Q_1

What is the problem about?

Q_2

What do I need to find?

Q_3

What do I know?

Q_4

What can I try?

Q_5

Does my answer make sense?



Steps for Solving Word Problems

Q₁. What is the problem about?

Q₂. What do I need to find?

Q₃. What do I know?

Q₄. What can I try?

Q₅. Does my answer make sense?