XPLAIN

and Show

problem connects to the learning
Have students use the MathBoard to
their thinking.

cises 1 and 3 to check students'
nding of the lesson concepts. Ask
to explain how the fraction strips
ach problem.

checked exercises for **Quick Check**.
should show their answers for the
eck on the MathBoard.

Quick Check RtI

a student misses the checked
exercises

Differentiate Instruction with

- Reteach 8.1
- Personal Math Trainer 5.NF.7a, 5.NF.7b
- RtI Tier 1 Activity (online)

LABORATE

em Solving • Applications

ATICAL PRACTICES

ARTER

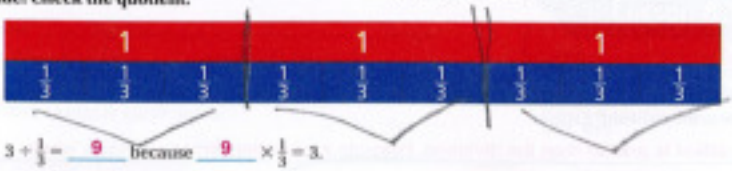
n assesses a student's ability to divide
number by a unit fraction and a unit
by a whole number. Students who
wo or more problems incorrectly
understand the concept of dividing
tions. Suggest students use number
raction strips to model division.
should use their model to write a
nultiplication equation.

Name _____

Share and Show

Divide. Check the quotient.

each what is ÷ in 3rds

1. 

$3 \div \frac{1}{3} =$ 9 because 9 $\times \frac{1}{3} = 3$.

2.

together

Think: What label should I write for each of the smaller marks?

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

18 $\times \frac{1}{6} = 3$.

3.

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

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

Divide. Draw a number line or use fraction strips.

on own

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

5. $3 \div \frac{1}{4} =$ 12

6. $\frac{1}{5} \div 2 =$ $\frac{1}{10}$

Problem Solving • Applications

7. DEEPER Luke has $\frac{1}{3}$ of a package of dried apricots. He divides the dried apricots equally into 3 small bags. Luke gives one of the bags to a friend and keeps the other two bags for himself. What fraction of the original package of dried apricots did Luke keep for himself?

$\frac{2}{9}$ of the entire package

8. THINK SMARTER For 8a–8e, select True or False for each equation.

8a.	$4 \div \frac{1}{3} = \frac{1}{12}$	○ True	● False
8b.	$6 \div \frac{1}{2} = 12$	● True	○ False
8c.	$\frac{1}{8} \div 2 = 16$	○ True	● False
8d.	$\frac{1}{3} \div 4 = \frac{1}{12}$	● True	○ False
8e.	$\frac{1}{5} \div 3 = 15$	○ True	● False

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MATHEMATICAL PRACTICES MODEL • REASON • MAKE SENSE

THINK SMARTER **Sense or Nonsense?**

9. Emilio and Julia used different ways to find $\frac{1}{2} \div 4$. Emilio used a model to find the quotient. Julia used a related multiplication equation to find the quotient. Whose answer makes sense? Whose answer is nonsense? Explain your reasoning.

Emilio's Work

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

Emilio's answer is nonsense. Possible explanation: Instead of finding 4 fraction strips with the same denominator to fit exactly under $\frac{1}{2}$, he found only 2 fraction strips. His model shows $\frac{1}{2} \div 2 = \frac{1}{4}$.

Julia's Work

If $\frac{1}{2} \div 4 = \square$, then $\square \times 4 = \frac{1}{2}$.

I know that $\frac{1}{8} \times 4 = \frac{1}{2}$.

So, $\frac{1}{2} \div 4 = \frac{1}{8}$ because $\frac{1}{8} \times 4 = \frac{1}{2}$.

Julia's answer makes sense. Possible explanation: Since multiplication and division are inverse operations, I can use this relationship to find the quotient by writing a related multiplication equation.

- For the answer that is nonsense, describe how to find the correct answer.

Possible answer: I could find 4 fraction strips with the same denominator to fit exactly under the $\frac{1}{2}$-fraction strip. I could use $\frac{1}{8}$-fraction strips.

10. MATHEMATICAL PRACTICE 4 **Use a Concrete Model** If you were going to find $\frac{1}{2} \div 5$, explain how you would find the quotient using fraction strips.

Possible explanation: I would show a 1-whole strip with a $\frac{1}{2}$-fraction strip under it. Then I would find 5 fraction strips with the same denominator that fit exactly under the $\frac{1}{2}$-fraction strip. $\frac{1}{2} \div 5 = \frac{1}{10}$

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DIFFERENTIATED INSTRUCTION INDEPENDENT ACTIVITIES

Grab-and-Go!™

Differentiated Centers Kit

Activities

Fraction Fix Up

Students complete orange Activity Card 6 by multiplying a whole number and a fraction.

Games

Fraction Factors

Students use number cards to multiply fractions with the greatest product.

THINK SMARTER

In Exercise 9, students are a quotient of a fraction divid number. Use the problem t understanding of the two p taught in this lesson, findin using a model and finding t a related multiplication equ

- **Which method do you pr find a quotient, using fra using a related multiplica Explain.** Possible answer: usin possible explanation: I prefer to because it is easier for me to di I can also use the model to chec

Math on the Spo Video Tutor

Use this video to help s solve this type of *Think*

GO DIGITAL **Math on the Spot** videos Student Edition and at ww

MP5 Use appropriate too strategically. Exercise 10 to explain a method for mo using fraction strips. Use th check understanding of the dividing a fraction by a wh

5 EVALUATE

Essential Questio

Using the Language

Reflect Have student part explaining to one another essential question.

How do you divide a whol fraction and divide a fracti number? Possible answer: Mod fraction strips or a number line.

Math Journal WR

Explain how you could use the quotient $4 \div \frac{1}{3}$.