LESSON MAKER PRO

Share or Count

Use fraction models to divide.

GRADE 5 · 5.NF.7

5.NF.7 "Extend the concept of division to divide unit fractions and whole numbers by using visual fraction models and equations. Interpret division of a unit fraction by a non-zero whole number and compute the quotient..."

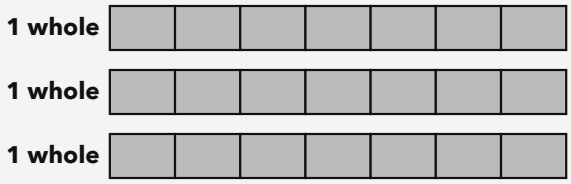
NAME _____ DATE _____

THE BIG IDEA

When you divide a whole number by a unit fraction, count how many pieces of that size fit in the wholes. When you divide a unit fraction by a whole number, split that fraction into equal shares. A model can help you decide which kind of division the problem shows.

WORKED EXAMPLE

How many 1/7 pieces are in 3 wholes?

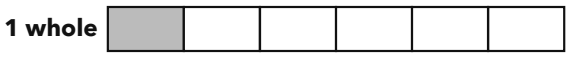


1. Each whole has 7 pieces of size 1/7.
2. Count the pieces: 7 + 7 + 7 = 21.
3. Write the division equation: 3 ÷ 1/7 = 21.

Answer: 21 pieces

PRACTICE 6 problems

1 The shaded part is shared equally by 2 people. Write a division equation and find the fraction of the whole each person gets.



ANSWER _____

2 How many pieces of size 1/5 are in the shaded wholes? Write a division equation and give the answer.

1 whole 

1 whole 

ANSWER _____

_____

3 Find 1/4 ÷ 5.

ANSWER _____

4 Find 6 ÷ 1/2.

ANSWER _____

5 Find 1/9 ÷ 6.

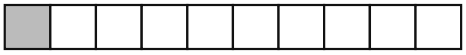
ANSWER _____

6 Find 5 ÷ 1/8.

ANSWER _____

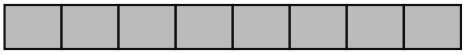
APPLY IT Show your work

1 A craft club has 1/10 meter of glitter tape. They cut it into 5 equal pieces for badges. How many meters of tape go on each badge? Use the model and write an equation.

1 meter 

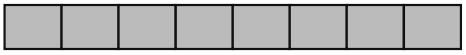
ANSWER _____

2 At a game night, there are 4 pizzas. Each player gets 1/8 of a pizza. How many players can get a serving? Use the model and write an equation.

1 pizza 

1 pizza 

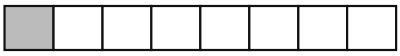
1 pizza 

1 pizza 

ANSWER _____

CHALLENGE One step up

Two friends split the shaded part of a sticker sheet equally. Then each friend splits their share equally between 2 teammates. What fraction of the whole sheet does each teammate get? Write two division equations.

1 whole sheet 

WORK SPACE AND ANSWER

ANSWER KEY

Share or Count

GRADE 5 · 5.NF.7

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	The shaded part is shared equally by 2 people. Write a division equation and find the fraction of the whole each person gets.	**1/6 ÷ 2 = 1/12; each person gets 1/12 of the whole.**
2	How many pieces of size 1/5 are in the shaded wholes? Write a division equation and give the answer.	**2 ÷ 1/5 = 10; there are 10 pieces.**
3	Find 1/4 ÷ 5.	**1/20**
4	Find 6 ÷ 1/2.	**12**
5	Find 1/9 ÷ 6.	**1/54**
6	Find 5 ÷ 1/8.	**40**

PART 2 · APPLY IT

1. **1/10 ÷ 5 = 1/50; each badge gets 1/50 meter of tape.** The shaded tenth is split into 5 equal pieces. Each piece is 1/50 of the whole meter.
2. **4 ÷ 1/8 = 32; 32 players can get a serving.** Each pizza has 8 servings of size 1/8. Count 8 servings in each of the 4 pizzas to get 32 servings.

CHALLENGE

1/8 ÷ 2 = 1/16, then 1/16 ÷ 2 = 1/32. Each teammate gets 1/32 of the whole sheet.

Accept equivalent equations and clear descriptions of the models. For the challenge, the first split makes two shares of 1/16, and the second split makes four final shares of 1/32.