LESSON MAKER PRO

Decimal Share Quest

Divide decimal amounts into equal groups.

GRADE 5 · 5.CE.3.e

5.CE.3.e "Solve single-step contextual problems involving division with decimals by applying strategies (e.g., estimation, modeling) and algorithms, including the standard algorithm."

NAME _____ DATE _____

DIVIDE WITH DECIMALS

Estimate first so you know about what your quotient should be. Divide as you do with whole numbers, and place the decimal point in the quotient directly above the decimal point in the dividend. Check by multiplying the quotient by the divisor.

WORKED EXAMPLE

7.2 meters of fabric are shared equally among 3 banners. How many meters does each banner get?

1. Estimate: 6 ÷ 3 = 2, so the answer should be near 2.
2. Set up 7.2 ÷ 3, and place the decimal point in the quotient above the decimal point in 7.2.
3. 3 goes into 7 two times, with 1 left over.
4. Regroup the 1 whole as 10 tenths, then combine it with the original 2 tenths to get 12 tenths. 12 tenths ÷ 3 = 4 tenths, so 7.2 ÷ 3 = 2.4.

Answer: 2.4 meters per banner

PRACTICE 6 problems

1 Four friends share 5.6 liters of lemonade equally. How many liters does each friend get?

ANSWER _____

2 A science class divides 9.9 ounces of soil equally among 9 cups. How many ounces of soil go in each cup?

ANSWER _____

3 Seven art tables share 8.4 meters of yarn equally. How many meters of yarn does each table get?

ANSWER _____

4 Six players share 12.6 points equally in a game. How many points does each player get?

ANSWER _____

5 Eight small jars are filled equally with 3.6 liters of paint. How many liters of paint go in each jar?

ANSWER _____

6 Five teams share 15.75 pounds of birdseed equally. How many pounds of birdseed does each team get?

ANSWER _____

APPLY IT Show your work

1 A bike club rides 18.4 miles over 8 equal practice days. How many miles does the club ride each day?

WORK SPACE

ANSWER _____

2 A game designer has 22.5 minutes of music to divide equally among 5 game levels. How many minutes of music will each level have?

WORK SPACE

ANSWER _____

CHALLENGE One step up

A school garden collects 19.68 liters of rainwater and pours it equally into 6 containers. How many liters go in each container? Explain why your answer is reasonable using an estimate.

WORK SPACE AND ANSWER

ANSWER KEY

Decimal Share Quest

GRADE 5 · 5.CE.3.e

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Four friends share 5.6 liters of lemonade equally. How many liters does each friend get?	**1.4 liters**
2	A science class divides 9.9 ounces of soil equally among 9 cups. How many ounces of soil go in each cup?	**1.1 ounces**
3	Seven art tables share 8.4 meters of yarn equally. How many meters of yarn does each table get?	**1.2 meters**
4	Six players share 12.6 points equally in a game. How many points does each player get?	**2.1 points**
5	Eight small jars are filled equally with 3.6 liters of paint. How many liters of paint go in each jar?	**0.45 liters**
6	Five teams share 15.75 pounds of birdseed equally. How many pounds of birdseed does each team get?	**3.15 pounds**

PART 2 · APPLY IT

1. **2.3 miles each day** Divide 18.4 by 8. Since 16 ÷ 8 = 2, an answer of 2.3 miles is reasonable.
2. **4.5 minutes per level** Divide 22.5 by 5. Since 20 ÷ 5 = 4, an answer of 4.5 minutes is reasonable.

CHALLENGE

3.28 liters per container. This is reasonable because 18 ÷ 6 = 3, so the exact answer should be a little more than 3 liters.

Accept equivalent decimal forms, such as 1.40 for 1.4. Students should include the correct unit when the problem asks for an amount.