LESSON MAKER PRO

Quantity Detectives

Use numbers, units, and reasonable checks.

GRADE 5 · 5.MP.2

5.MP.2 "Reason abstractly and quantitatively."

NAME _____ DATE _____

TRACK THE QUANTITIES

Name what each number means and keep its unit. Choose an operation, solve, then check that your answer makes sense in the situation.

WORKED EXAMPLE

A craft table has 8 trays with 14 buttons on each tray. How many buttons are there?

1. 8 trays × 14 buttons per tray
2. 8 × 14 = 112
3. The unit is buttons.

Answer: 112 buttons

PRACTICE 5 problems

1 A club puts 36 beads into 4 equal bags. How many beads are in each bag?

ANSWER _____

2 Noah reads for 15 minutes each day for 5 days. How many minutes does he read?

ANSWER _____

3 A recipe uses 3/4 cup of yogurt for one batch. You make 2 batches. How much yogurt do you use?

ANSWER _____

4 A class places 42 stickers equally on 7 pages. How many stickers go on each page?

ANSWER _____

5 Mia has $10.00 and spends $3.65 at the school store. How much money is left?

ANSWER _____

APPLY IT Show your work

1 At an arcade, 18 game cards cost $27. At the same rate, how much do 30 game cards cost?

WORK SPACE

ANSWER _____

2 A game design club has 120 minutes. It uses 1/4 of the time to plan and 2/5 of the time to build. How many minutes are left for testing?

WORK SPACE

ANSWER _____

CHALLENGE One step up

A school store has 5 packs of 12 pencils. It sells 17 pencils in the morning and 19 in the afternoon. A student says 24 pencils are left. Is the student correct? Explain with calculations and units.

WORK SPACE AND ANSWER

ANSWER KEY

Quantity Detectives

GRADE 5 · 5.MP.2

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	A club puts 36 beads into 4 equal bags. How many beads are in each bag?	**9 beads per bag**
2	Noah reads for 15 minutes each day for 5 days. How many minutes does he read?	**75 minutes**
3	A recipe uses 3/4 cup of yogurt for one batch. You make 2 batches. How much yogurt do you use?	**1 1/2 cups**
4	A class places 42 stickers equally on 7 pages. How many stickers go on each page?	**6 stickers per page**
5	Mia has $10.00 and spends $3.65 at the school store. How much money is left?	**$6.35**

PART 2 · APPLY IT

1. **$45** Find the cost per card: $27 ÷ 18 = $1.50. Then multiply $1.50 × 30.
2. **42 minutes** Planning takes 30 minutes and building takes 48 minutes. Subtract 78 from 120.

CHALLENGE

Yes. 5 × 12 = 60 pencils, and 17 + 19 = 36 pencils sold. 60 - 36 = 24 pencils left.

Accept equivalent fraction forms for 1 1/2 cups, such as 3/2 cups. For the challenge, accept any clear calculation that shows 60 pencils to start, 36 sold, and 24 left.