LESSON MAKER PRO

Equal Group Quest

Use multiplication and division to solve group problems.

GRADE 3 · 3.PAR.3.6

3.PAR.3.6 "Solve practical, relevant problems involving multiplication and division within 100 using part-whole strategies, visual representations, and/or concrete models."

NAME _____ DATE _____

PARTS AND WHOLES

Multiplication finds the whole when you know the number of equal groups and the number in each group. Division finds the number in each group or the number of groups when you know the whole.

WORKED EXAMPLE

A music room has 9 shelves with 9 drums on each shelf. How many drums are there?

1. Write the equal-groups equation: 9 × 9 = ___.
2. Add the equal parts: 9 + 9 + 9 + 9 + 9 + 9 + 9 + 9 + 9 = 81.
3. So, 9 × 9 = 81.

Answer: 81 drums

PRACTICE 6 problems

1 There are 4 equal groups of 6 pencils. How many pencils are there?

ANSWER _____

2 42 cookies are shared equally among 6 plates. How many cookies are on each plate?

ANSWER _____

3 5 bags hold 8 marbles each. How many marbles are there?

ANSWER _____

4 48 game cards are put equally into 6 piles. How many cards are in each pile?

ANSWER _____

5 7 rows have 4 chairs each. How many chairs are there?

ANSWER _____

6 64 buttons are sorted equally into 8 jars. How many buttons are in each jar?

ANSWER _____

APPLY IT Show your work

1 A student has 24 stickers. She puts 4 stickers on each notebook. How many notebooks get stickers?

WORK SPACE

ANSWER _____

2 A school garden has 5 rows of sunflower plants. Each row has 7 plants. How many sunflower plants are in the garden?

WORK SPACE

ANSWER _____

CHALLENGE One step up

Maya has 56 beads. She puts them equally into 7 bags. Then she uses 2 beads from each bag for a craft. How many beads are left in the bags?

WORK SPACE AND ANSWER

ANSWER KEY

Equal Group Quest

GRADE 3 · 3.PAR.3.6

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	There are 4 equal groups of 6 pencils. How many pencils are there?	**24 pencils**
2	42 cookies are shared equally among 6 plates. How many cookies are on each plate?	**7 cookies**
3	5 bags hold 8 marbles each. How many marbles are there?	**40 marbles**
4	48 game cards are put equally into 6 piles. How many cards are in each pile?	**8 cards**
5	7 rows have 4 chairs each. How many chairs are there?	**28 chairs**
6	64 buttons are sorted equally into 8 jars. How many buttons are in each jar?	**8 buttons**

PART 2 · APPLY IT

1. **6 notebooks** Divide the whole number of stickers by the number on each notebook. 24 / 4 = 6.
2. **35 plants** Multiply the number of rows by the number of plants in each row. 5 × 7 = 35.

CHALLENGE

42 beads

Accept equations, repeated addition, skip counting, arrays, or equal-sharing work that leads to the correct answer. For the challenge, students may show 56 / 7 = 8, then 8 - 2 = 6 in each bag, and 6 × 7 = 42.