

Division Detective

Find what the quotient tells you.

GRADE 3 • 3.OA.A.2

CCSS.Math.Content.3.OA.A.2 "Interpret whole-number quotients of whole numbers, e.g., interpret $56 \div 8$ as the number of objects in each share when 56 objects are partitioned equally into 8 shares..."

NAME _____

DATE _____

TWO WAYS TO DIVIDE

A division expression can tell how many objects are in each equal group. It can also tell how many equal groups you can make when you know the number in each group.

WORKED EXAMPLE

42 buttons are shared equally among 6 art boxes. How many buttons go in each box?

1. There are 42 buttons and 6 equal boxes.
2. Divide: $42 \div 6 = 7$.
3. Each box gets 7 buttons.

Answer: 7 buttons in each box

PRACTICE 6 problems

- 1** 24 beads are shared equally among 3 friends. How many beads does each friend get?

ANSWER _____

- 2** 28 trading cards are placed 7 on each page. How many pages are needed?

ANSWER _____

- 3** A coach puts 32 water bottles into 4 equal coolers. Complete: $32 \div 4$ means ____ bottles in each cooler.

ANSWER _____

- 4** 45 paper stars are placed into bags of 9. How many bags can be filled?

ANSWER _____

- 5** 40 puzzle pieces are shared equally among 8 tables. How many pieces are at each table?

ANSWER _____

- 6** 54 crayons are packed in groups of 2. How many crayon packs can be made?

ANSWER _____

APPLY IT Show your work

- 1** At a book fair, 56 bookmarks are put into 8 equal prize bags. How many bookmarks are in each prize bag?

WORK SPACE

ANSWER _____

- 2** Jay has 36 mini erasers. He makes packs with 4 erasers in each pack. How many packs can Jay make?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A robotics club has 64 badge stickers. First, they share them equally among 8 members. Then imagine they make groups of 8 stickers instead. What does $64 \div 8$ tell you in each situation? Explain.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	24 beads are shared equally among 3 friends. How many beads does each friend get?	8 beads
2	28 trading cards are placed 7 on each page. How many pages are needed?	4 pages
3	A coach puts 32 water bottles into 4 equal coolers. Complete: $32 \div 4$ means ___ bottles in each cooler.	8 bottles
4	45 paper stars are placed into bags of 9. How many bags can be filled?	5 bags
5	40 puzzle pieces are shared equally among 8 tables. How many pieces are at each table?	5 pieces
6	54 crayons are packed in groups of 2. How many crayon packs can be made?	27 packs

PART 2 • APPLY IT

- 7 bookmarks in each prize bag** Divide 56 by 8. The quotient tells how many bookmarks are in each equal bag.
- 9 packs** Divide 36 by 4. The quotient tells how many groups of 4 erasers can be made.

CHALLENGE

When 64 stickers are shared among 8 members, each member gets 8 stickers. When the stickers are put into groups of 8, there are 8 groups.

Accept answers that include the correct quotient with the correct unit, such as "8 per cooler" or "8 bottles in each cooler." For the challenge, students should state both meanings of $64 \div 8$.