LESSON MAKER PRO

Ratios in Action

Compare groups and totals with ratio language.

GRADE 6 · 6.AT.A.1

6.AT.A.1 "Use ratio language in context (e.g., "__ to __," "for every," "per") to describe a ratio relationship between two quantities, including part to part and part to whole (e.g...."

NAME _____ DATE _____

PART OR WHOLE?

A ratio compares two quantities in a stated order. To compare one group with the whole, add all the groups first. Use words such as "to" or "for every" to make clear what you are comparing.

WORKED EXAMPLE

Write the ratio of soccer balls to all balls using "for every."

EQUIPMENT BIN

Ball	Count
Soccer	7
Basketball	5

1. Find all the balls: 7 + 5 = 12.
2. Compare 7 soccer balls to 12 balls in all.

Answer: For every 7 soccer balls, there are 12 balls in all.

PRACTICE 4 problems

1 A game has 4 robots and 9 aliens. Write the ratio of robots to aliens in words.

ANSWER _____

2 A collection has 6 stickers and 8 stamps. Write the ratio of stickers to all items in words.

ANSWER _____

3 A team has 3 wins and 10 losses. Write the ratio of losses to wins in words.

ANSWER _____

4 A shelf has 11 fiction books and 2 nonfiction books. Write the ratio of nonfiction books to all books in words.

ANSWER _____

APPLY IT Show your work

1 Students voted for a club activity. Use the table to describe the ratio of maze votes to all votes using "for every."

CLUB VOTE

Activity	Votes
Maze	9
Trivia	6

ANSWER _____

2 A game bag holds 10 red tokens and 3 blue tokens. Write the ratio of blue to red, then blue to all tokens.

WORK SPACE

ANSWER _____

CHALLENGE One step up

A snack mix has 8 orange pieces and 6 lime pieces. A student says 8 to 6 compares orange pieces to all pieces. Give the correct ratio and explain the mistake in one sentence.

WORK SPACE AND ANSWER

ANSWER KEY

Ratios in Action

GRADE 6 · 6.AT.A.1

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	A game has 4 robots and 9 aliens. Write the ratio of robots to aliens in words.	**4 robots to 9 aliens**
2	A collection has 6 stickers and 8 stamps. Write the ratio of stickers to all items in words.	**6 stickers to 14 items in all**
3	A team has 3 wins and 10 losses. Write the ratio of losses to wins in words.	**10 losses to 3 wins**
4	A shelf has 11 fiction books and 2 nonfiction books. Write the ratio of nonfiction books to all books in words.	**2 nonfiction books to 13 books in all**

PART 2 · APPLY IT

1. **For every 9 maze votes, there are 15 votes in all.** Add 9 and 6 to find 15 total votes. Compare maze votes to total votes.
2. **3 blue tokens to 10 red tokens; 3 blue tokens to 13 tokens in all** Compare 3 blue tokens with 10 red tokens. Add the groups to find 13 tokens in all.

CHALLENGE

The ratio of orange pieces to all pieces is 8 to 14 because there are 14 pieces in all, while 8 to 6 compares orange pieces to lime pieces.

Accept equivalent ratio notation when the quantities and their order are clear. For part-to-whole answers, the second quantity must include both groups.