LESSON MAKER PRO

Ratio Matchup

Compare quantities in the correct order.

GRADE 6 · 6.NR.4.1

6.NR.4.1 "Explain the concept of a ratio, represent ratios, and use ratio language to describe a relationship between two quantities."

NAME _____ DATE _____

COMPARE IN ORDER

A ratio compares two quantities by division. Keep the quantities in order, because red to blue is not the same as blue to red. You can write a ratio as a:b, a to b, or a/b.

WORKED EXAMPLE

A craft bin has 9 green ribbons and 15 orange ribbons. Write the ratio of green ribbons to orange ribbons in simplest form.

1. Start with green to orange: 9:15.
2. Divide both parts by 3: 9 ÷ 3 : 15 ÷ 3.
3. Write the simplest ratio: 3:5.

Answer: 3:5, or 3 green ribbons to 5 orange ribbons

PRACTICE 6 problems

1 A supply table has 14 glue sticks and 7 pairs of scissors. Write the ratio of glue sticks to pairs of scissors in simplest a:b form.

ANSWER _____

2 A ratio of drums to keyboards is 4:11. Describe this ratio using words.

ANSWER _____

3 A game shelf has 10 puzzle games and 40 card games. Write the ratio of puzzle games to card games in simplest form.

ANSWER _____

4 A bracelet has 13 purple beads and 17 silver beads. Write the ratio of purple beads to silver beads as a fraction.

ANSWER _____

5 A bike rack holds 28 mountain bikes and 49 road bikes. Write the ratio of mountain bikes to road bikes in simplest form.

ANSWER _____

6 A key chain uses a ratio of 6 star charms to 19 letter charms. Complete the sentence: For every ___ star charms, there are ___ letter charms.

ANSWER _____

APPLY IT Show your work

1 At an esports club meeting, 35 students play strategy games and 20 students play sports games. Write the ratio of strategy-game players to sports-game players in simplest form. Then describe the ratio using words.

WORK SPACE

ANSWER _____

2 For a travel survey, 44 students chose the bus and 11 students chose a bike as their usual ride to school. Write the ratio of bus riders to bike riders in simplest form. Then describe the ratio using words.

WORK SPACE

ANSWER _____

CHALLENGE One step up

A school garden has green plants and black plants in a ratio of 7:11. There are 44 black plants. How many green plants are there? Then write the ratio of green plants to all plants in simplest form. Explain how you know.

WORK SPACE AND ANSWER

ANSWER KEY

Ratio Matchup

GRADE 6 · 6.NR.4.1

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	A supply table has 14 glue sticks and 7 pairs of scissors. Write the ratio of glue sticks to pairs of scissors in simplest a:b form.	**2:1**
2	A ratio of drums to keyboards is 4:11. Describe this ratio using words.	**For every 4 drums, there are 11 keyboards.**
3	A game shelf has 10 puzzle games and 40 card games. Write the ratio of puzzle games to card games in simplest form.	**1:4**
4	A bracelet has 13 purple beads and 17 silver beads. Write the ratio of purple beads to silver beads as a fraction.	**13/17**
5	A bike rack holds 28 mountain bikes and 49 road bikes. Write the ratio of mountain bikes to road bikes in simplest form.	**4:7**
6	A key chain uses a ratio of 6 star charms to 19 letter charms. Complete the sentence: For every ___ star charms, there are ___ letter charms.	**For every 6 star charms, there are 19 letter charms.**

PART 2 · APPLY IT

1. **7:4; For every 7 strategy-game players, there are 4 sports-game players.** Divide 35 and 20 by 5 to get 7:4. The ratio statement must list strategy-game players first.
2. **4:1; For every 4 bus riders, there is 1 bike rider.** Divide 44 and 11 by 11 to get 4:1. The phrase must compare bus riders to bike riders in that order.

CHALLENGE

There are 28 green plants. The ratio of green plants to all plants is 7:18 because 44 is 4 groups of 11, so there are 4 groups of 7, or 28, green plants. There are 28 + 44 = 72 plants total, and 28:72 simplifies to 7:18.

Accept equivalent ratios when a problem does not require simplest form, as long as the quantities stay in the stated order. For ratio-language responses, accept clear wording that correctly states the two quantities and their order.