

Max the Monkey's Ratio and Proportion Challenge

Learning objective: To understand and apply the concepts of ratio and proportion to solve mathematical problems.

Read the front of the card, think about the answer, and then flip to see if you are correct! Use these to test your knowledge of how ratios compare quantities.

What is a ratio?

A ratio shows the relative sizes of two or more values, comparing how much of one thing there is compared to another.

If Max the Monkey has 3 bananas and 2 apples, what is the ratio of bananas to apples?

3:2

If a recipe requires a ratio of 2 cups of flour to 1 cup of sugar, how much flour is needed for 4 cups of sugar?

8 cups of flour ($2 \times 4 = 8$)

True or False: A ratio of 4:8 is equivalent to 1:2.

True. Both ratios represent the same proportion when simplified.

In a bag of sweets, the ratio of red sweets to blue sweets is 3:5. If there are 8 sweets in total, what fraction are red?

$\frac{3}{8}$

To scale up a drawing by a factor of 3, what must you do to the original lengths?

Multiply every length by 3.

If 5 pens cost £2.00, how much do 10 pens cost?

£4.00 (The ratio of pens to cost is 5:2, so 10:4).

Simplify the ratio 10:15 to its simplest form.

2:3 (Divide both numbers by their highest common factor, 5).

What is the difference between a part-to-part ratio and a part-to-whole ratio?

Part-to-part compares two different groups, while part-to-whole compares one group to the entire collection.

Max has a ratio of 2 stickers to 7 postcards. If he has 14 postcards, how many stickers does he have?

4 stickers ($7 \times 2 = 14$, so $2 \times 2 = 4$).