

Max's Ratio and Proportion Masterclass

Get Ready to Solve the World with Max: Master the Magic of Ratios!

- A ratio shows the relative size of two or more values. If there are 3 red apples and 2 green apples, the ratio of red to green is 3:2.
- Proportion describes how a part relates to the whole. In our apple example, $\frac{3}{5}$ of the total apples are red, and $\frac{2}{5}$ are green.
- Ratios can be simplified just like fractions! If you have a ratio of 4:8, you can divide both sides by 4 to get the equivalent ratio of 1:2.
- When scaling up or down, you must multiply or divide both sides of the ratio by the same number to keep the proportion consistent.
- To find a missing value, identify the relationship between the known numbers. If the ratio is 2:5 and you have 10 items in the first group, you multiplied by 5, so you must multiply the second group by 5 as well (25).

Did you know? Did you know that architects use ratio to build models of buildings? If a model has a scale of 1:100, it means every 1cm on the model represents 100cm in the real world. It's like shrinking the world down to fit on your desk!

Key vocabulary: Ratio · Proportion · Scale factor · Comparison · Equivalent · Part-to-part · Part-to-whole