Max’s Volume Challenge: Year 6 Maths Flashcards

Learning objective: To calculate the volume of cuboids and understand the units of measurement used for 3D space.

Use these flashcards to test your knowledge of volume. Read the question on the front, think of the answer, then check the back to see if Max the monkey agrees with your calculation!

What is the definition of volume?	The amount of three-dimensional space an object occupies.
What is the formula for calculating the volume of a cuboid?	Volume = length × width × height.
If a cube has a side length of 3cm, what is its volume?	$27cm^3$ (3 × 3 × 3 = 27).
What is the standard unit of measurement for the volume of small objects?	Centimetres cubed (cm^3).
Max has a box that is 5cm long, 2cm wide, and 4cm high. What is its volume?	$40cm^3$ (5 × 2 × 4 = 40).
True or False: Volume is a measure of two-dimensional space.	False. Volume measures three-dimensional space.
If a cuboid has a volume of $24cm^3$ and its base area is $8cm^2$, what is its height?	3cm (24 ÷ 8 = 3).
How many cubic centimetres are in a litre?	$1,000cm^3$.
Ellie the elephant has a water tank 10cm long, 10cm wide, and 10cm high. What is its volume?	$1,000cm^3$.
If you double the length, width, and height of a cube, does the volume stay the same?	No, it increases by a factor of 8.