

Max's Volume Challenge: Grade 4 Math Flashcards

Learning objective: To understand and calculate the volume of 3D shapes using cubes and formulae.

Read the front of the card to test your knowledge of volume. Flip to the back to check your answer with Max the Monkey's help!

What is the definition of volume?

The amount of three-dimensional space an object occupies.

Which unit of measurement is most commonly used for small 3D objects?

Cubic centimetres (cm³).

If a shape is made of 12 cubes, each 1cm x 1cm x 1cm, what is its total volume?

12cm³.

What is the formula to calculate the volume of a cuboid?

Volume = length × width × height.

Max has a box with a length of 4cm, a width of 3cm, and a height of 2cm. What is the volume?

24cm³ ($4 \times 3 \times 2 = 24$).

True or False: Volume measures the space inside a container, while capacity measures how much a container can hold.

True.

If a cube has a side length of 3cm, what is its volume?

27cm³ ($3 \times 3 \times 3 = 27$).

How many cubic centimetres are in 1 liter?

1,000cm³.

Max builds a tower with a base of 5cm by 2cm and a height of 4cm. What is the total volume?

40cm³ ($5 \times 2 \times 4 = 40$).

Does a 3D shape with a larger volume always weigh more?

No, it depends on the density of the material used.