



Let's Learn About Cubes & Rectangular Prisms!

Have you ever wondered about the shapes all around us? Today, we're going on an exciting adventure into the world of 3D shapes: cubes and rectangular prisms! Get ready to explore their secrets and see how they pop up in everyday life.



Cube: What is it?

A solid shape with 6 square faces. All the sides are the same size, like a perfect block!






Rectangular Prism: What is it?

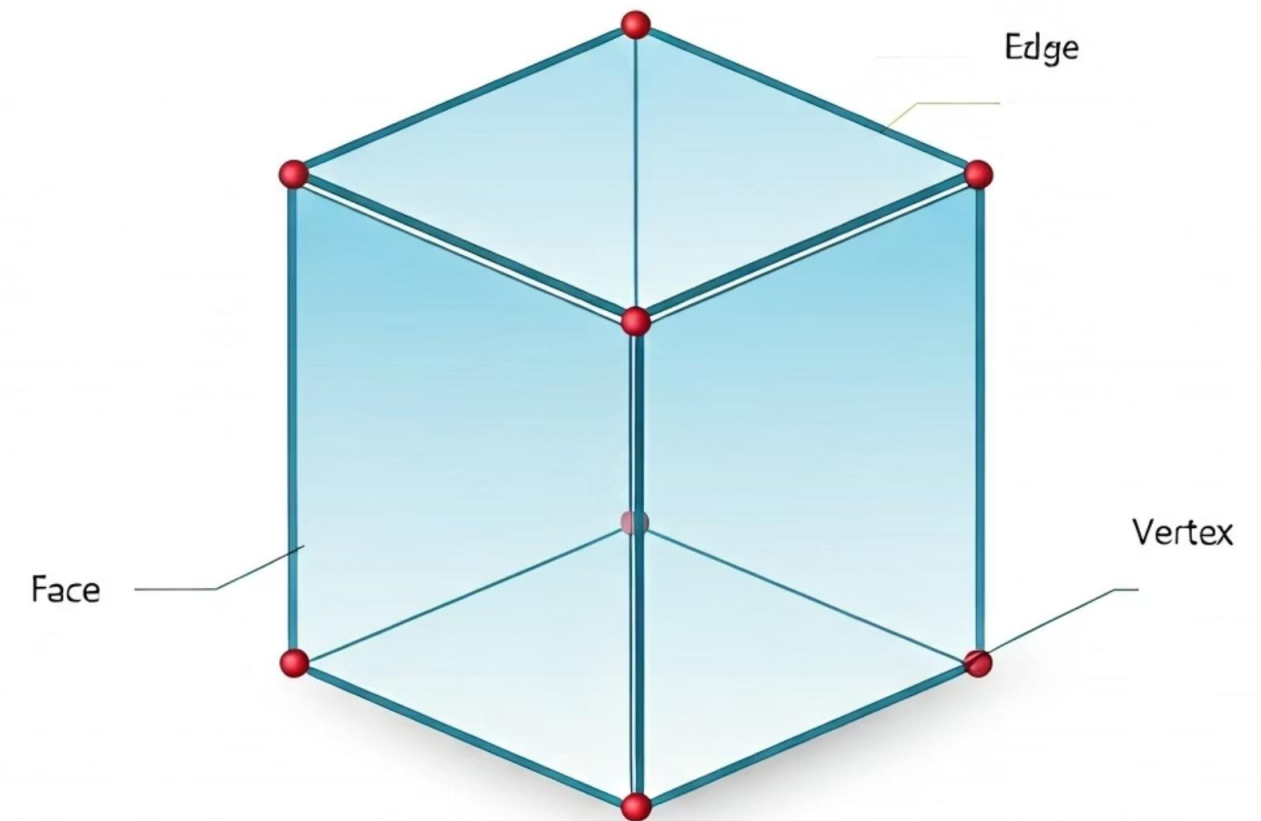
A box-shaped solid with 6 rectangle faces. Some sides can be longer or shorter, just like a shoebox!



Discovering Shape Parts!

Every 3D shape, like our cubes and rectangular prisms, has special parts that help us describe them. Think of them like the different pieces of a puzzle!

-  Faces: These are the flat sides of the shape. Imagine the smooth surfaces you can touch!
-  Edges: These are the lines where two faces meet. They're like the seams on a box.
-  Corners (Vertices): These are the pointy spots where edges come together. They're like the tips of a star!






How Big Are They? Let's Measure!

We can measure how much space is inside a shape and how much area is on its outside. These are super helpful for building and packing!



 Volume (Space inside the shape)

Cube: side \times side \times side

Example: If each side is 2 cm $\rightarrow 2 \times 2 \times 2 = 8 \text{ cm}^3$




Rectangular Prism:

length \times width \times height

Example: 3 cm \times 2 cm \times 4 cm = 24 cm^3



 Surface Area (Outside area)

Just add up the area of all the faces!

- Cube: 6 faces that are all the same
- Rectangular Prism: 3 pairs of rectangle faces

Let's Practice with Examples!

Now that we know the formulas, let's try some examples together! It's like solving a fun puzzle!

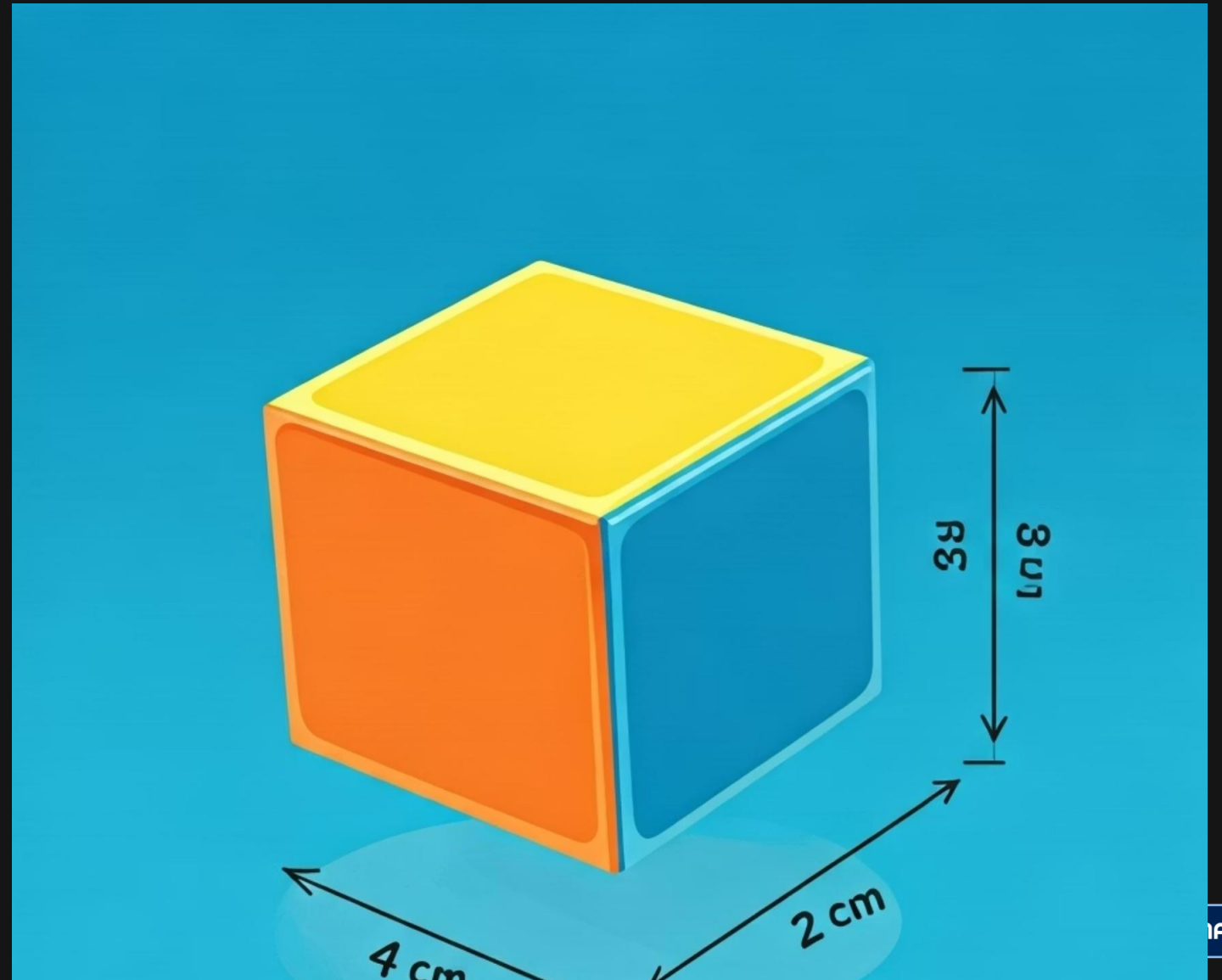
Cube Example

- Side = 3 cm
- Volume = $3 \times 3 \times 3 = 27 \text{ cm}^3$
- Surface Area = $6 \times (3 \times 3) = 6 \times 9 = 54 \text{ cm}^2$



Rectangular Prism Example

- Length = 4 cm, Width = 2 cm, Height = 3 cm
- Volume = $4 \times 2 \times 3 = 24 \text{ cm}^3$
- Surface Area = $2 \times (4 \times 2) + 2 \times (4 \times 3) + 2 \times (2 \times 3) = 2 \times 8 + 2 \times 12 + 2 \times 6 = 52 \text{ cm}^2$



🧸 Real-Life Shape Hunt!

Cubes and rectangular prisms are everywhere! Once you start looking, you'll see them in your home, at school, and even at the playground!







Can you find any more cube or rectangular prism shapes around you?



Keep Exploring Shapes!

Learning about shapes is a journey of discovery! Here are some fun tips to keep your geometry adventure going:

-  **Keep it simple!**
Use short sentences and clear words to explain ideas.
It makes learning super easy!
-  **Labels and lists are your friends!**
Like treasure maps, labels and bullet points guide you to understanding.
-  **Bright colors and fun pictures!**
Visuals make learning exciting and help you remember things better!
-  **Hands-on fun!**
Try building shapes with your own blocks or paper.
Feel the faces, edges, and corners!

You're all geometry stars! Keep exploring and having fun with shapes!