

Cubes and cuboids

A **cuboid** is a solid with six rectangular faces and all its angles are right angles. A cube is a special example of a cuboid because all its faces are squares.

Example 1

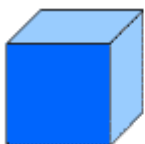


Each of these two cuboids has the same volume, 8 cm^3 , and the same dimensions: length 4 cm, width 2 cm, height 1 cm.

You can find the volume of the first (blue) cuboid by counting the unit cubes.

To find the volume of the second (red) cuboid, you need to use the rule:
volume of a cuboid = length \times width \times height.

Example 2



This cube has sides of length 2 cm

The dimensions of a cube are all the same, so the rule for finding the volume is:
volume of a cube = length \times length \times length = length³.

The volume of this cube is $2 \times 2 \times 2 = 8 \text{ cm}^3$