lume of cuboids

lculate the volume of cuboids using 1 cm³ cubes

You will need:
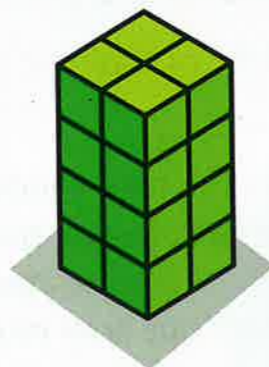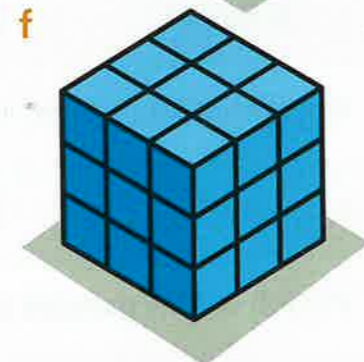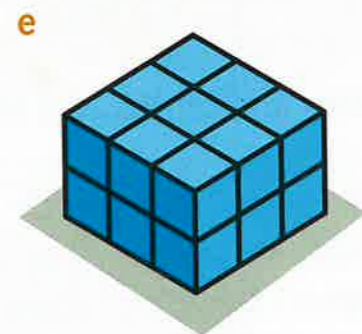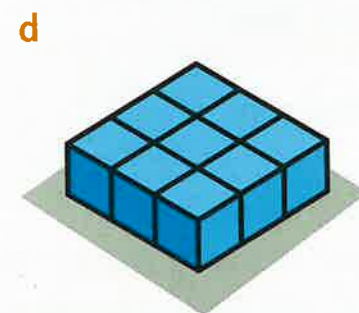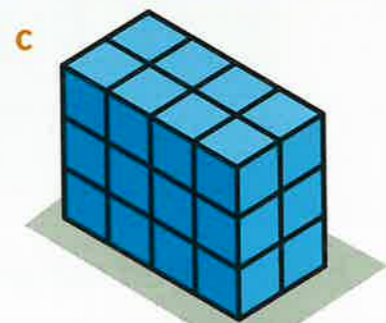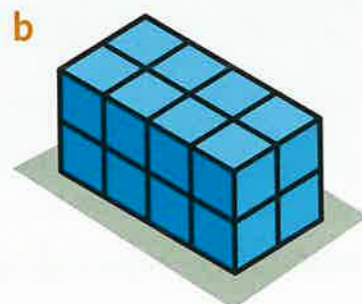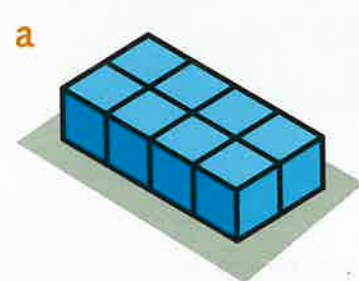• 1 cm interlocking cubes

Work out the volume of each cuboid by the number of 1 cm cubes in each layer.

Example
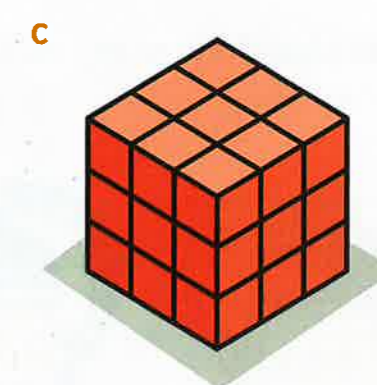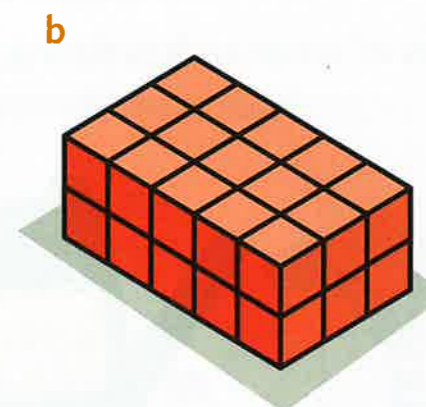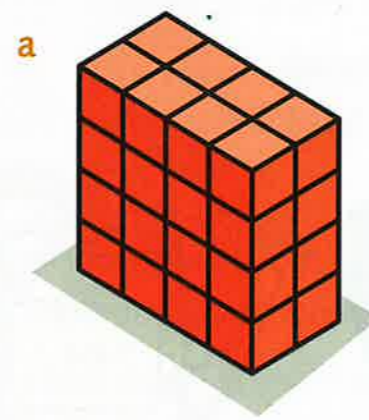

1 layer of 4 cubes
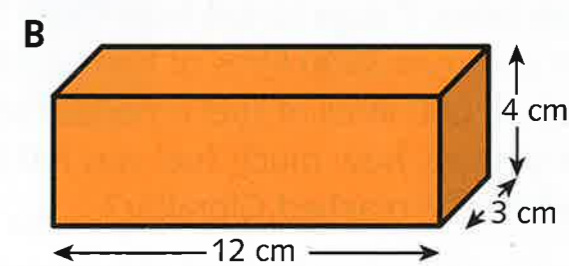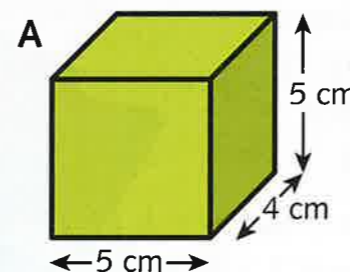Volume = 4 cm³

2 layers of 4 cubes
Volume = 4 cm³ × 2
= 8 cm³

a

b

c

d

e

f

1 Calculate the volume of this cuboid by counting the number of 1 cm cubes in each layer.

**2** Calculate the volume of each cube or cuboid by counting the number of 1 cm cubes.

a

b

c

3 a Build each cuboid using 1 cm interlocking cubes.

b Calculate the volume of each cuboid in cubic centimetres.

A
5 cm
4 cm
←5 cm→

B
4 cm
3 cm
12 cm

4 This shape can be turned into a cuboid by adding some 1 cm cubes.

a Estimate the least number of 1 cm cubes you will need.

b Build the cuboid.

c Calculate its volume in cubic centimetres.
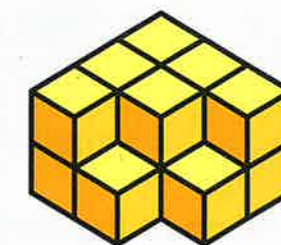
Challenge 3

Estimate the least number of cubes you will need to make:

a shape A into a cube

b shape B into a cuboid.

A

B