

5

VOLUME

White
Rose
Maths



From White Rose Maths schemes for Year 5 Summer Term
BLOCK 5 - VOLUME

1 Here is a jug of orange juice.

How much juice is in the jug?

ml



Aisha drinks 90 ml of orange juice.

How much juice is left in the jug?

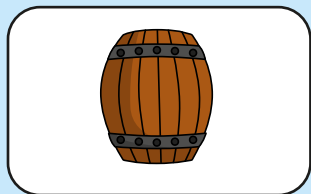
2 Match the items to the estimated capacities.



2 litres



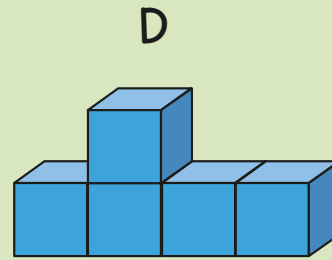
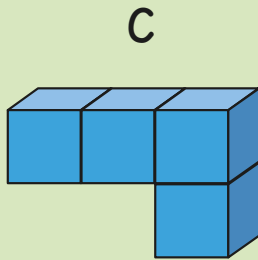
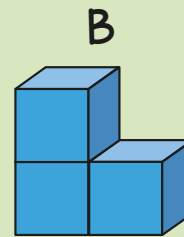
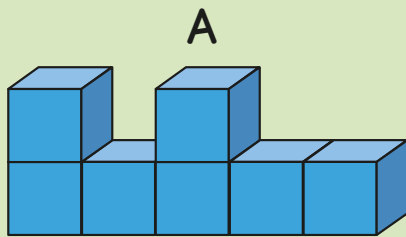
250 ml



250 litres

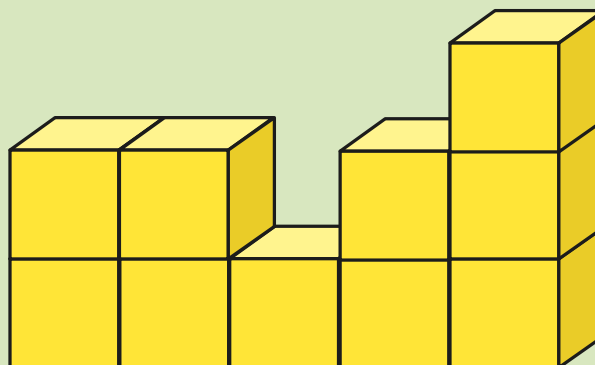
3

Order the shapes from smallest to greatest volume.



Kim makes a shape using centimetre cubes.

Here is her shape.

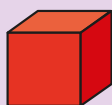


What is the volume of her shape?

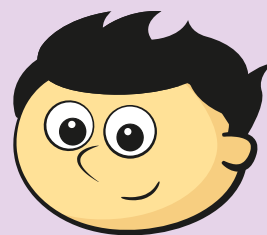
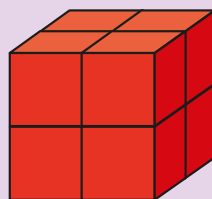
cm³

4

Jack is making cubes.



1 small cube



Using 12 identical small cubes, I can make a larger cube.

Jack is incorrect.

Explain why.

How many more small cubes would Jack need to make a cube with a side that is 3 small cubes long?

5

Annie is having a party for 7 friends.

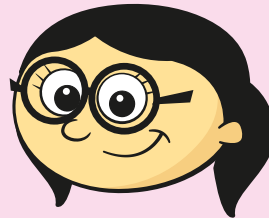
She buys a bottle of lemonade and some glasses.



2 litres



250 ml



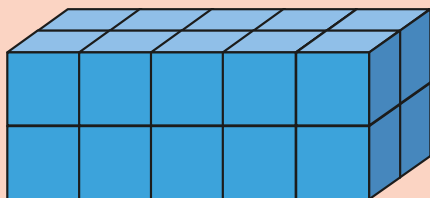
I want everyone to have a full glass of lemonade.

Has Annie bought enough lemonade for herself and her friends? Explain your answer.

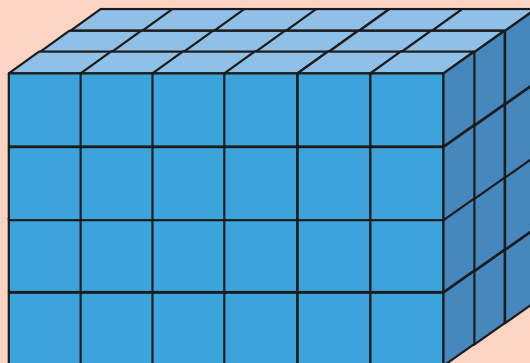
A large empty rectangular box with a purple border and a small tail on the left side, intended for the student to write their answer.

- 6 Each small cube has a length of 1 m.

Work out the volumes of the cuboids.



m³



m³

- 7 Teddy makes a cuboid using an odd number of centimetre cubes.

Explain why the length of the cube cannot be 4 cm.

8

A jug contains 300 ml of water.



A cup has a capacity of 75 ml.

How many cups can be filled with the jug?

A different cup holds 60 ml.

Will there be more or fewer of these cups filled by the jug?

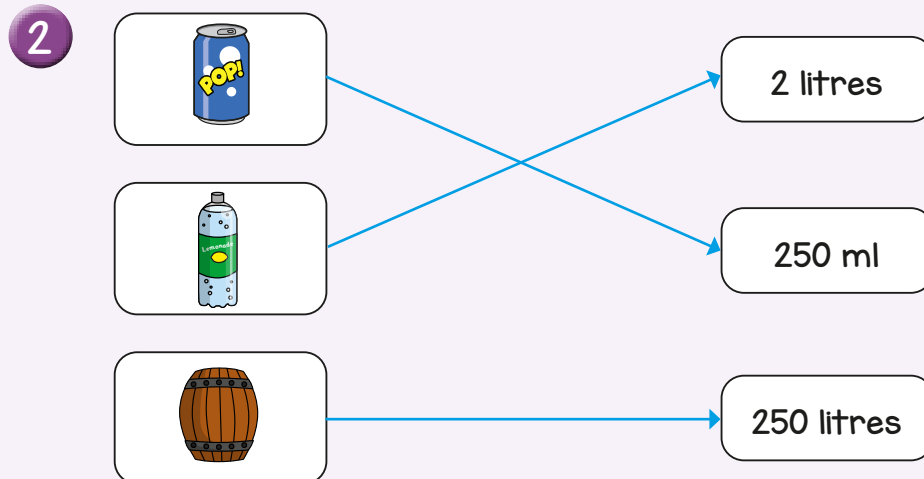
Show your workings.



Answers



- 1 150 ml
60 ml



- 3 B, C, D, A
 10 cm^3

- 4 If Jack added 4 more cubes to the medium cube it would make a cuboid, not a cube.
19 more cubes

- 5 Yes.
8 full glasses of lemonade will be exactly 2 litres.

- 6 20 m^3
 72 m^3

- 7 If the length is 4, then there will be 64 cubes in the cuboid.

- 8 4 cups
more cups, as $60 \text{ ml} \times 5 \text{ cups} = 300 \text{ ml}$