5 VOLUME

1 Here is a jug of orange juice.

How much juice is in the jug?

[   ] ml
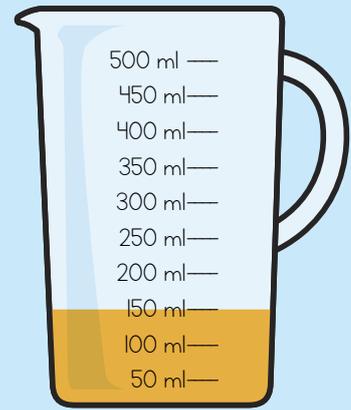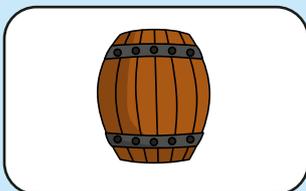
Aisha drinks 90 ml of orange juice.

How much juice is left in the jug?

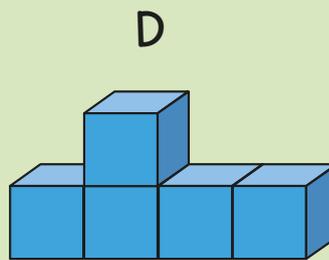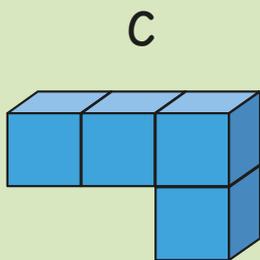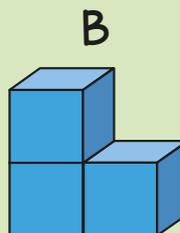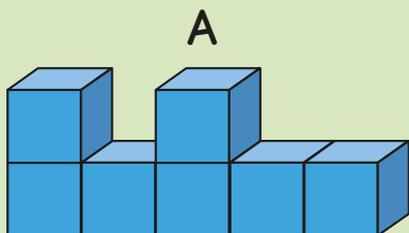**2** Match the items to the estimated capacities.

2 litres

250 ml

250 litres

3 Order the shapes from smallest to greatest volume.

A

B

C

D

_____

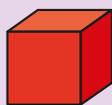Kim makes a shape using centimetre cubes.
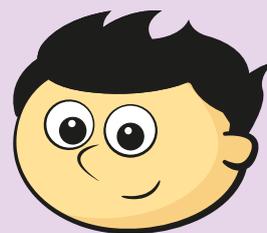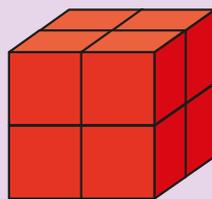
Here is her shape.
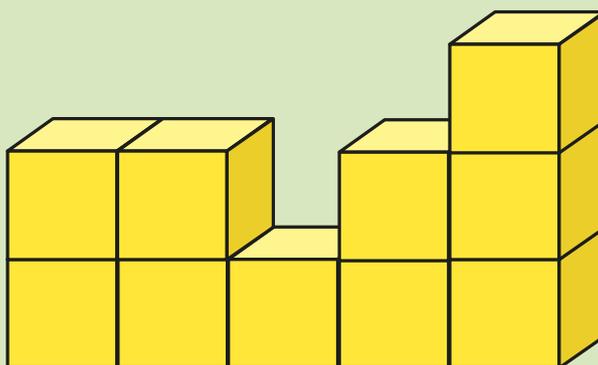
What is the volume of her shape?

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?

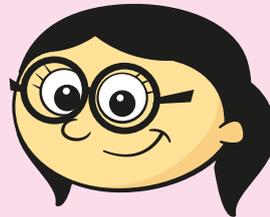**5** Annie is having a party for 7 friends.

She buys a bottle of lemonade and some glasses.
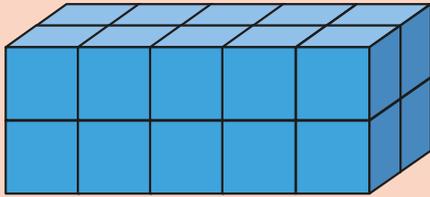
2 litres   250 ml

I want everyone to have a
full glass of lemonade.

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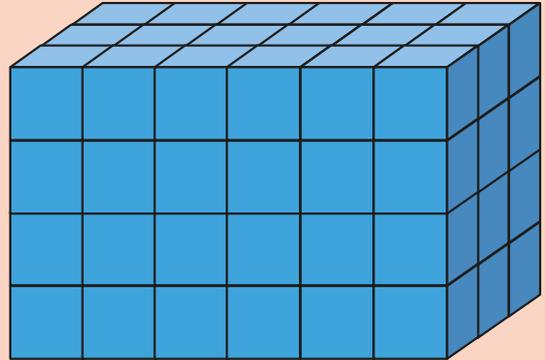her friends? Explain your answer.

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.

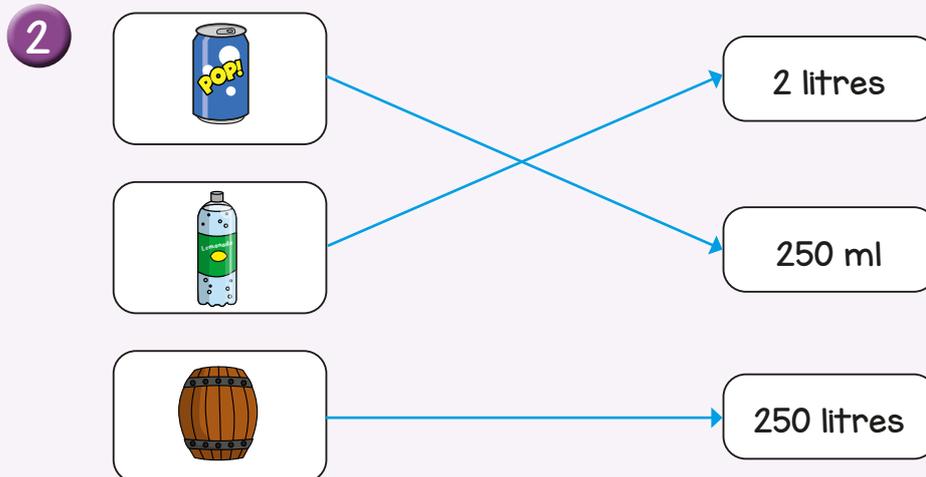Will there be more or fewer of these cups filled by the jug?

Show your workings.

Answers

1 150 ml
60 ml

2

POP! (can) → 250 ml

Lemonade (bottle) → 2 litres

Barrel → 250 litres

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 ml × 5 cups = 300 ml