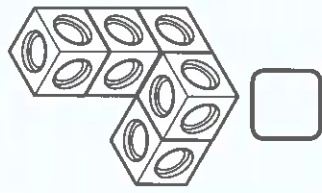
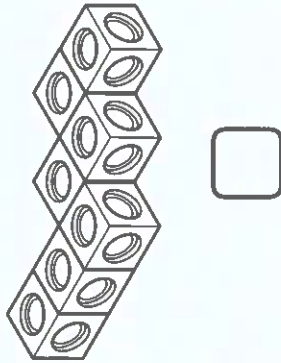


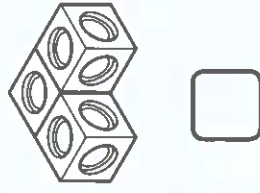
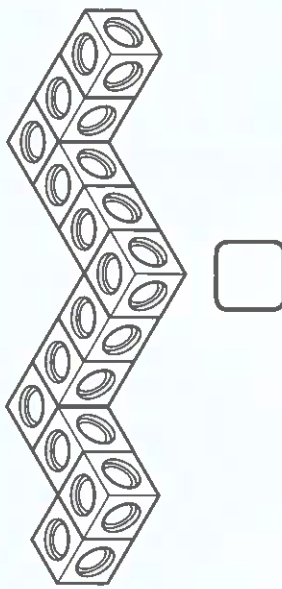
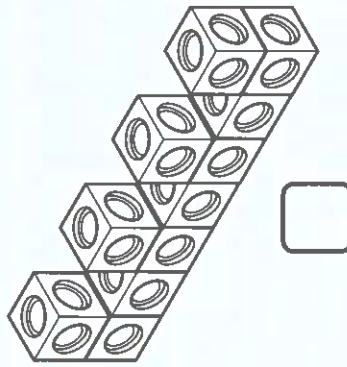
Comparing volumes

Tick the shape in each set that has the greatest volume.

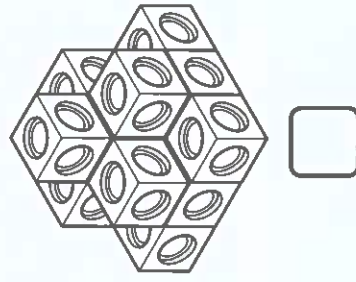
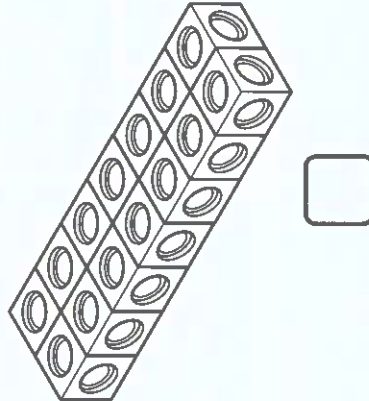
a)

☐☐

b)

☐☐☐

c)

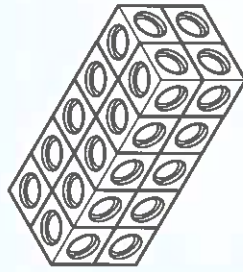
☐☐

d) Did you need to count all the cubes in each shape?

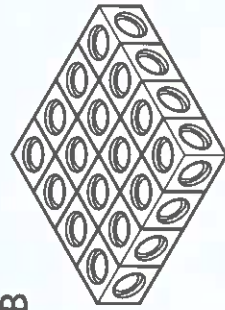
Explain your answer.

2 Sort these shapes. List them from greatest to least volume.

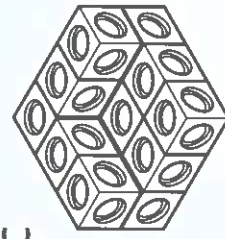
A



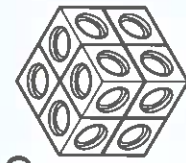
B



C



D



Greatest volume ☐ , ☐ , ☐ , ☐ Least volume

3

Match each shape to the correct person by writing their name under their shape.

My shape is half the volume of Bella's.



Amelia

My shape has more than 10 unit cubes.

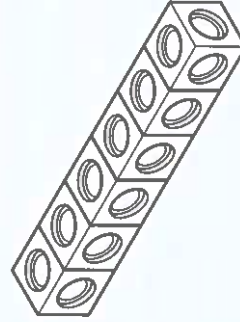
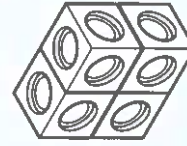
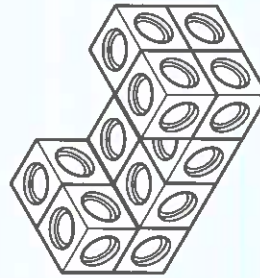


Bella

My shape has a volume one third of Bella's shape.



Max



1 Add cubes to shape A so that it has the same volume as shape B.



2 Aki makes a tower 15 cubes tall.

Emma makes a cuboid 4 cubes long, 2 cubes wide and 2 cubes high.

Predict who has made the shape with the greatest volume.

I predict that _____ has made the shape with the greatest volume because _____.

Now make each shape and check. Was your prediction correct?

reflect

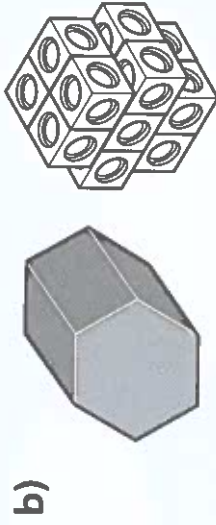
Explain why two shapes that are made up of the same number of cubes can be different shapes but the same volume.

Estimating volume

1 Ambika estimates the volume of each 3D shape by making it with cubes.



Estimate of volume
= unit cubes



Estimate of volume
= unit cubes

2 Lexi builds some cubes to estimate the volume of her pencil.



Lexi says the volume of the pencil is 12 unit cubes.



How accurate do you think Lexi's estimate is? Explain your answer.
