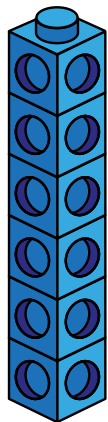


Compare volume

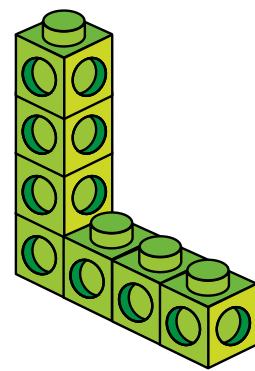


- 1 Whitney and Tommy have each made a shape using cubes. Each cube has a volume of 1 cm^3

Whitney



Tommy



- a) What is the volume of Whitney's shape? cm^3
- b) What is the volume of Tommy's shape? cm^3
- c) Whitney and Tommy are comparing the volumes of their shapes.



Whitney

My shape has a greater volume, because it is taller.



Tommy

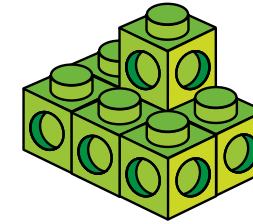
My shape has a greater volume, because I used more cubes.

Who do you agree with? _____

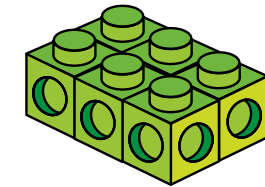
Explain your answer.

- 2 Each cube has a volume of 1 cm^3
What is the volume of each shape?

a)

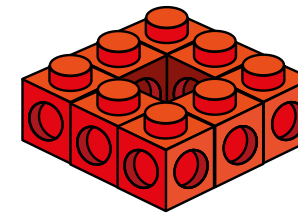


cm^3

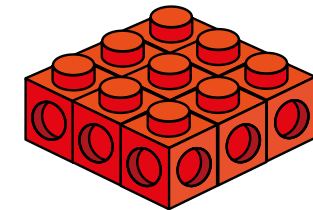


cm^3

b)

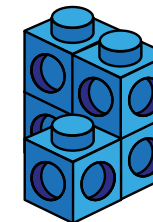


cm^3

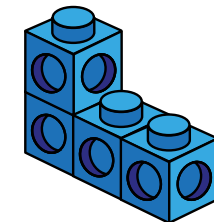


cm^3

c)

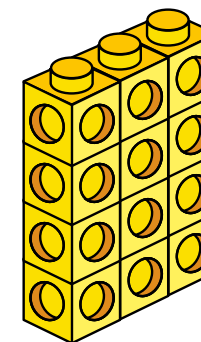


cm^3

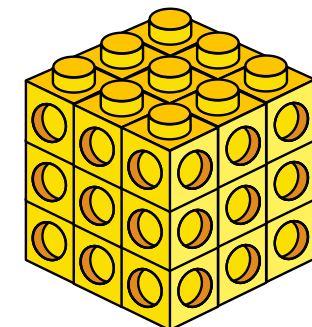


cm^3

d)



cm^3

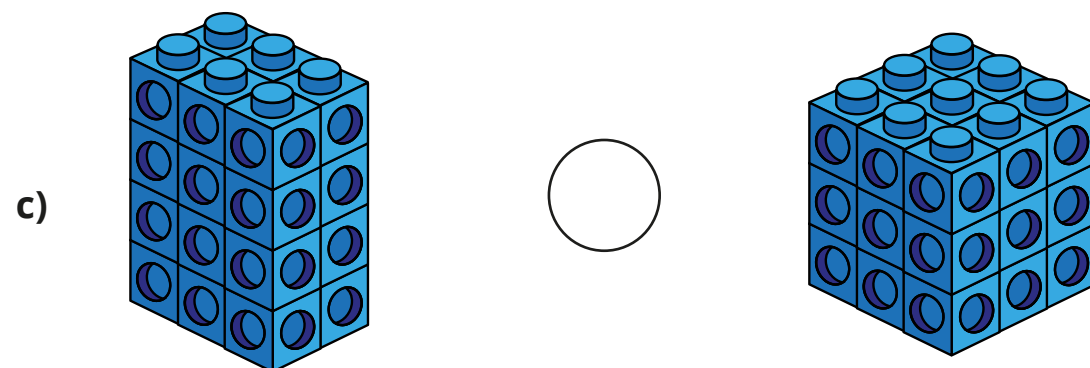
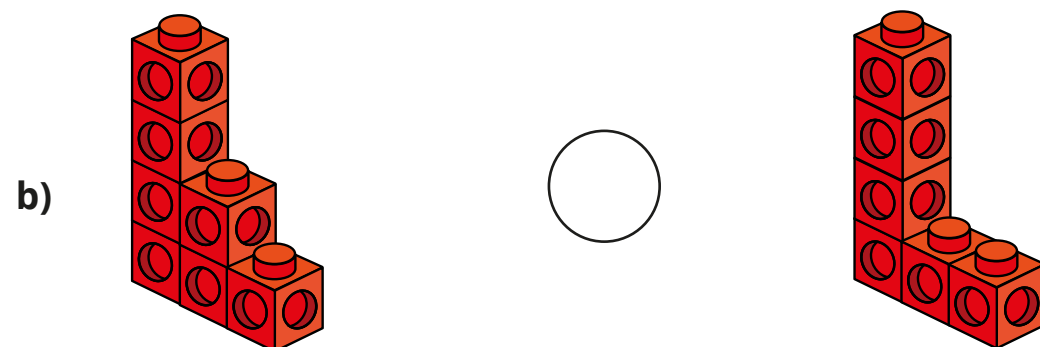
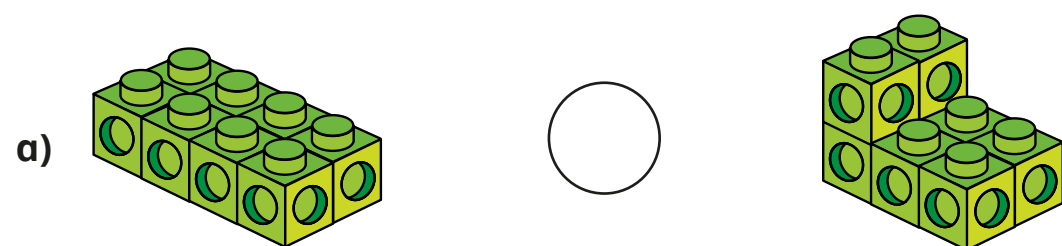


cm^3

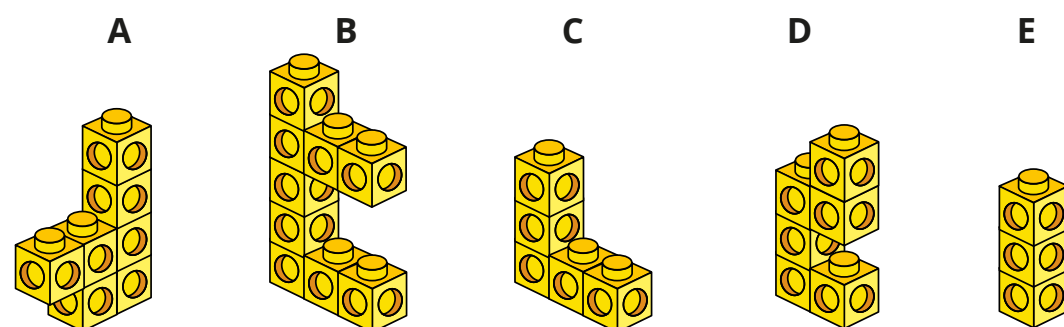
Tick the shape with the greater volume in each pair.



- 3 Write $<$, $>$ or $=$ to compare the volumes of the shapes.



- 4 Here are some shapes made from cubes.

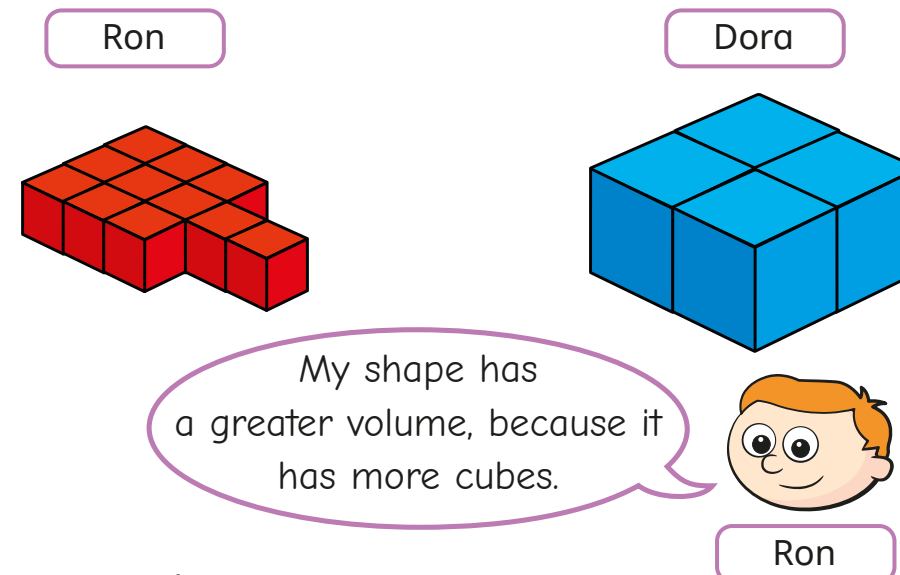


Put the shapes in ascending order of volume.

Make your own shapes for a partner to put in order.



- 5 Ron and Dora have each made a shape using cubes.

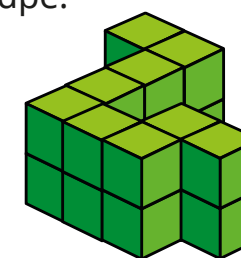


Do you agree with Ron? _____

Talk about it with a partner.

- 6 Amir, Eva and Alex have made shapes out of centimetre cubes.

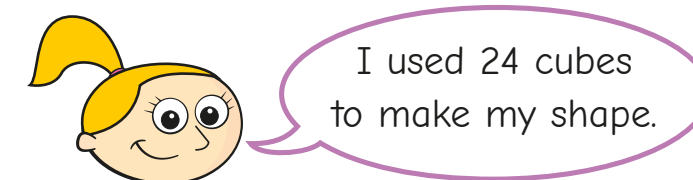
- a) Amir has made this shape.



What is the volume of Amir's shape?

cm^3

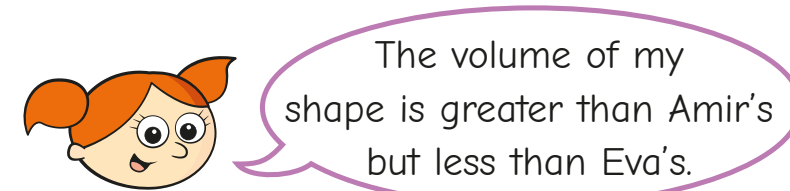
- b)



What is the volume of Eva's shape?

cm^3

- c)



What could the volume of Alex's shape be?

cm^3

Compare answers with a partner.