



FUNCTIONAL SKILLS MATHEMATICS

AQA | Edexcel | City & Guilds | Open Awards | NCFE | Highfield

Level 2

3D Shapes

Materials

- You **cannot** use a calculator for **questions** with this symbol.



Instructions

- Answer **all** questions.
- Answer questions on separate paper.

Information and Advice

- The marks for each question are shown in brackets – use this as a guide on how long to spend on each question.
- Read each question carefully before you answer it.
- Check you answers.

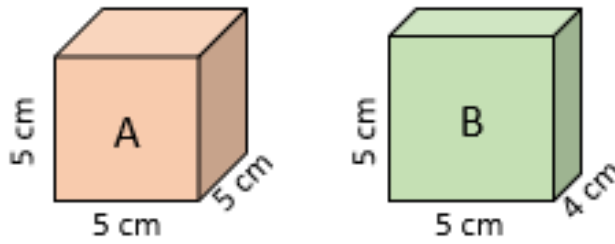


Q1 Name the three dimensions involved in calculating the volume of a 3D object.

[1 mark]



Q2 Which object is bigger, A or B?



[1 mark]

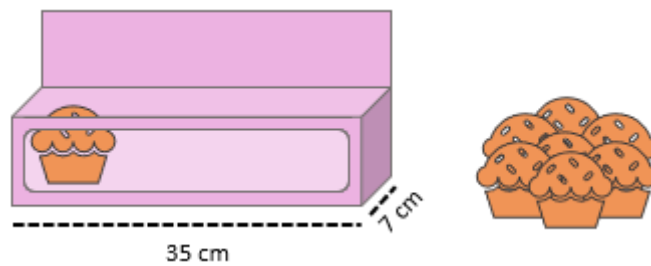


Q3 What length of shelf would be necessary to hold 15 books of width 2 cm?

[2 marks]



Q4 Wayne is putting cupcakes into a box of length 35 cm and width 7 cm. Each cupcake is 7 cm long. How many cupcakes can he put in the box?

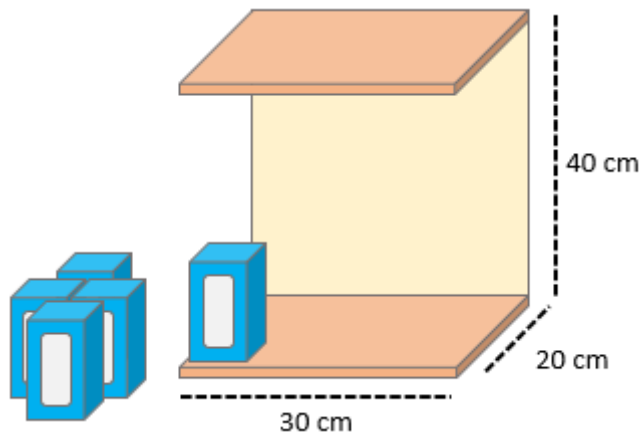


[2 marks]

Q5 Garth is moving house. He stacks DVD cases (laid down, on their largest surface) inside a 70 cm tall box. Each DVD case has a height of 19 cm, a length of 14 cm and a width of 1.4 cm. Assuming there is only enough space left for one stack of DVDs, how many can he fit in the box?

[2 marks]

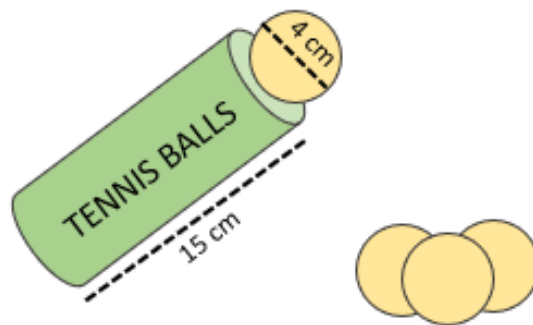
Q6 Cassandra is stacking shampoo on shelves in a shop. Given that each bottle of shampoo is contained within a box of length and width of 6 cm, and height 12.5 cm, how many boxes can she put on the shelf? Assume she can stack the boxes.



[4 marks]



Q7 Jamila is putting tennis balls into a tube, like so.



Given that the balls have a diameter of 4 cm and the tube has a height of 15 cm, how many balls can she put in the tube?

[2 marks]



Q8 Match each shape to its appropriate name.

Triangle-based Pyramid •

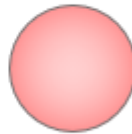
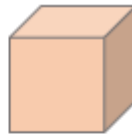
Cube •

Cylinder •

Sphere •

Cuboid •

Square-based Pyramid •



[6 marks]