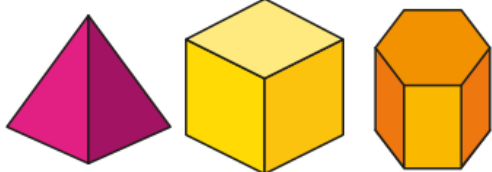
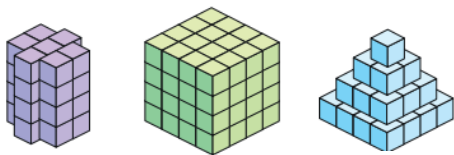


Fluency

1) Here are some 3D shapes.



Rosie uses cubes to estimate the volume of each shape. Each cube has a volume of 1 cm^3 .



- Match the cubes to the correct shape above.
 - Estimate the volume of each shape using the cubes.
- 2) Match the object to its approximate volume.



33 cm^3

$33,000 \text{ cm}^3$

$330,000 \text{ cm}^3$

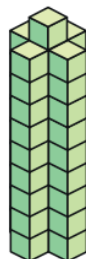
Problem Solving

3) A shopkeeper is estimating the volume of a fridge.

The fridge holds 40 bottles of water. The shopkeeper uses cubes to estimate the volume of one bottle of water.

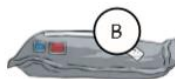
Each cube has a volume of 10 cm^3 .

Estimate the volume of the **fridge**.



4) Parcel A has a volume of 350 cm^3 .

Estimate the volume of Parcel B.



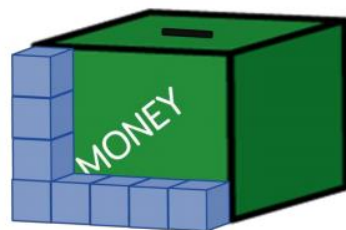
5) The capacity of this bottle is 1 litre.

Estimate the volume of liquid inside it.



Reasoning

6) Jack is using cubes to estimate the volume of his money box.



He says the volume will be 20 cm^3 .

Do you agree with Jack? Explain your answer. If you do not agree, what is the approximate volume of the money box?

7) Halle says, "I have a litre bottle of juice. I estimate that I'll have around 200ml left after I've had one drink."

Do you agree with her and why?

Mastery Challenge

Each of the cubes have a volume of 1 m^3 . The volume of the whole shape is between 64 m^3 and 96 m^3 .

What the shape look like?

