

3 cubes



5 cuboids



2 cylinders



How many faces and edges does each 3D shape have?

cube - 6 faces and 12 edges,

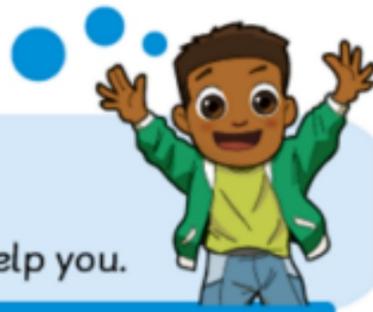
cuboid - 6 faces and 12 edges,

cylinder - 2 flat faces, 1 curved face and 2 edges.

Thinking Cap



Look at these 3D shapes above.
What is the same and what is different?
Find the same 3D shapes around you to help you.



same

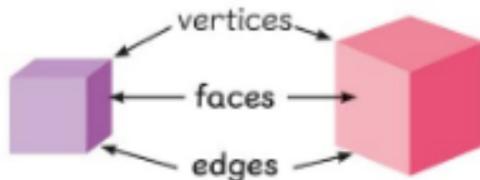
3D shapes have edges,
faces and vertices.

different

The number of edges,
faces and vertices
in each 3D shape is different.

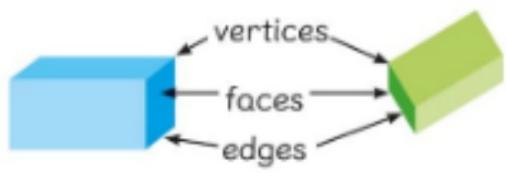
Let's Learn

a Izzy has some 3D shapes.



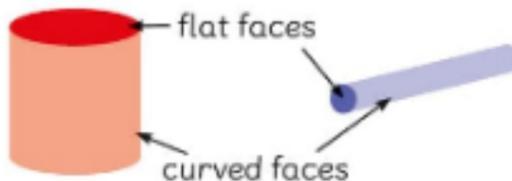
A **cube** has 6 faces, 8 vertices and 12 edges.

Each face is a square.



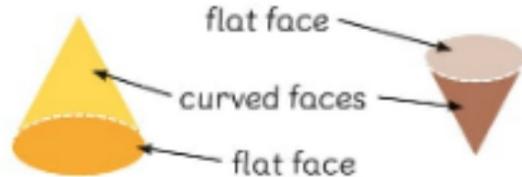
A **cuboid** has 6 faces, 8 vertices and 12 edges.

Each face is a rectangle or a square.



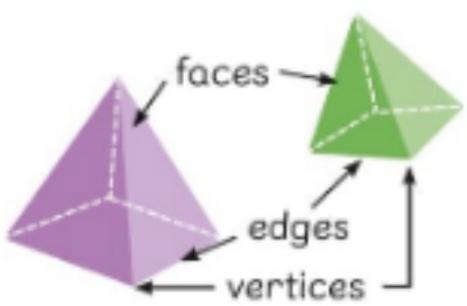
3 faces
A cylinder has 2 flat faces and 1 curved face.

Its flat face is a circle.



2 faces
A cone has 1 flat face and 1 curved face.

Its flat face is a circle.



What is the same and
what is different between
a cone and a pyramid?



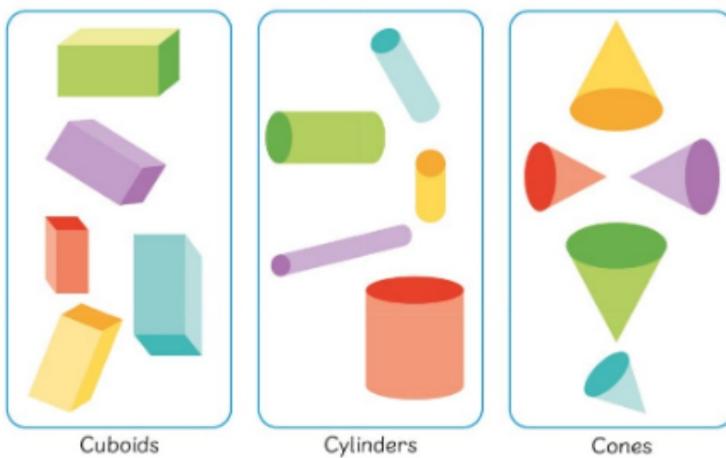
A pyramid has a base and triangular faces.

The base can be any polygon.

This pyramid has 5 faces, 5 vertices
and 8 edges.

4 triangular faces
1 square face (base)

b Rajah sorts the shapes into groups.



He sorts the shapes by **number of faces/ edges/vertices**

c Alice makes a pattern using different 3D shapes.

Get a sticker from page 249 to complete the pattern.



The pattern repeats this way:
cuboid, cylinder, cone, cube,
cuboid, cylinder, cone, cube, ...

The missing 3D shape
is a **cube**

What other patterns
can you make with
3D shapes?



Let's Practise



1 Fill in each blank.

cylinder ^a



3 faces
2 edges
0 vertices

2 flat faces (circles)

1 curved face ^b

cuboid



6 faces
12 edges
8 vertices

2



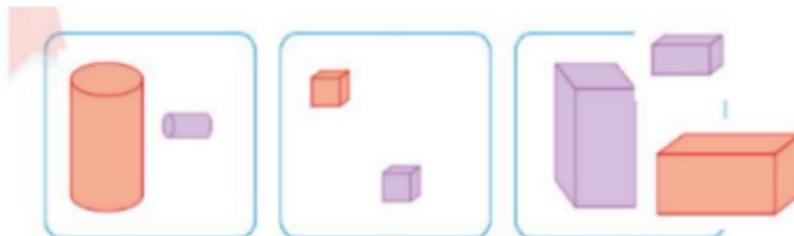
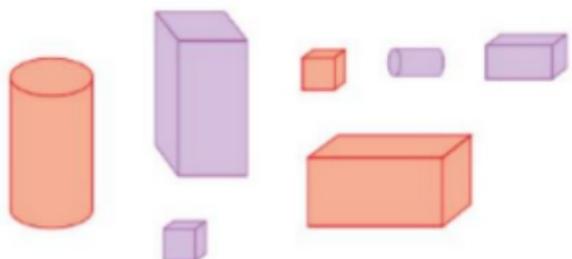
I am thinking of a 3D shape.
It has 6 faces, 8 vertices
and 12 edges.

What shape is Caz thinking of? cube or cuboid

What 2D shapes does this shape have? squares and rectangles



3 Get 3D shapes stickers from page 249.
Sort the 3D shapes into groups on the next page.



How do you sort them? by shape

Explain to your partner.

4 Ralph uses the 3D shapes to make a pattern.



Use the same shapes to form another pattern.

Use the stickers on page 250 to help you.

any pattern that you can make is acceptable