Week 10, Day 4
3-D shape (1)

Each day covers one maths topic. It should take you about 1 hour or just a little more.

1. If possible, watch the **PowerPoint presentation** with a teacher or another grown-up.

   OR start by carefully reading through the **Learning Reminders**.

2. Tackle the questions on the **Practice Sheet**.
   There might be a choice of either Mild (easier) or Hot (harder)!
   Check the answers.

3. Finding it tricky? That's OK... have a go with a grown-up at **A Bit Stuck?**

4. Think you've cracked it? Whizzed through the Practice Sheets?
   Have a go at the **Practical Activity**...

Learning Reminders

Naming 3-D shapes and identifying their properties.
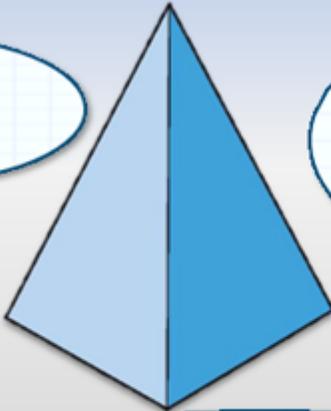
Can you name each shape?

Cylinder

Cone

Pyramid

Cube

Cuboid

Sphere

Learning Reminders

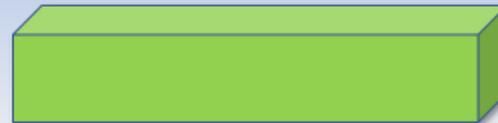## Naming 3-D shapes and identifying their properties.
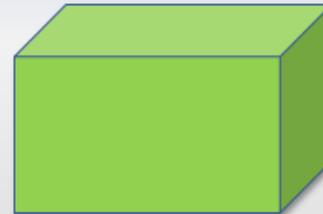
This shape is a **pyramid**.

What shapes are its faces? Pyramids can have different shapes on the base but the other faces are **always triangles**.

The Egyptians made buildings in this shape. This shape is called a **square-based pyramid**, just like the Egyptians' pyramids.
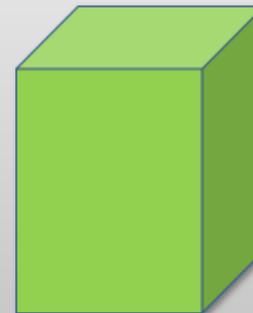
Naming 3-D shapes and identifying their properties.

These are all **cuboids**.

The shapes might look a bit different, but all are cuboids because they have **6 faces which are oblongs and squares**.
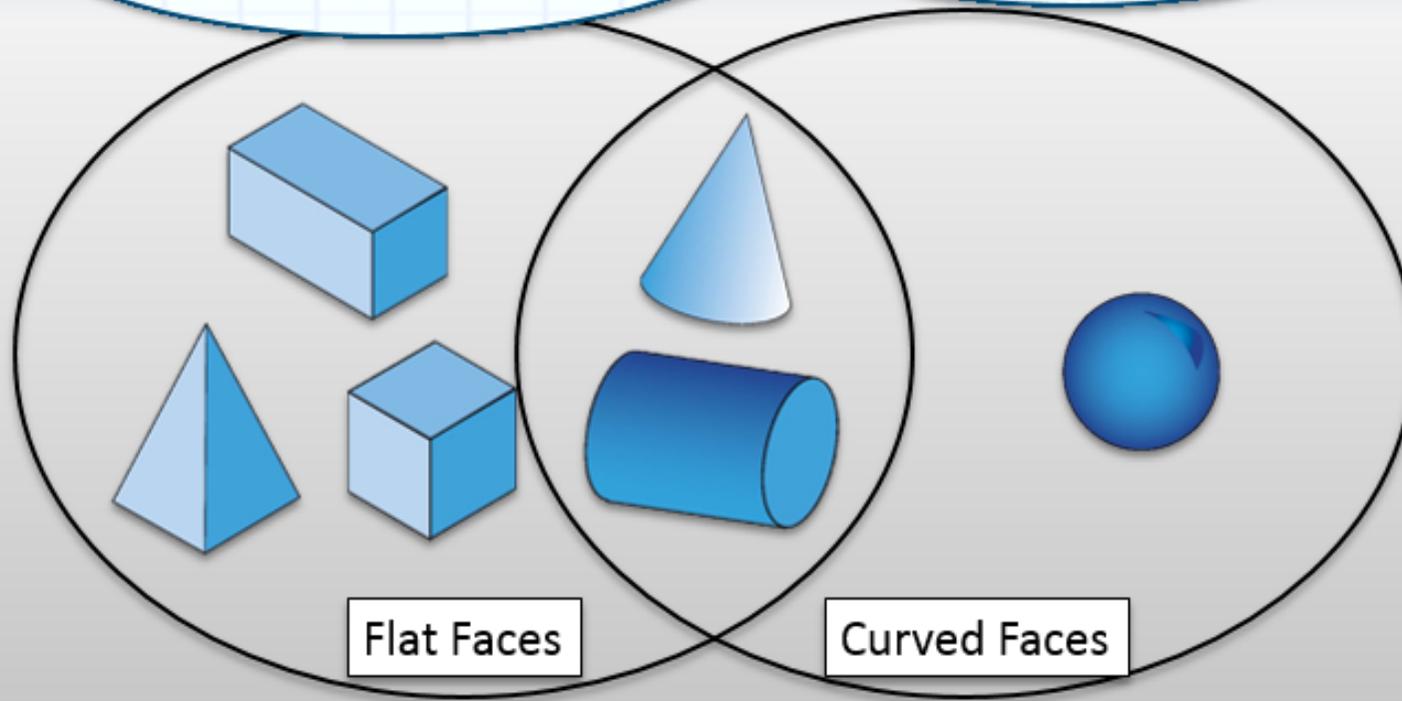
Their **opposite faces** are always the **same shape and size**.

Learning Reminders

Naming 3-D shapes and identifying their properties.

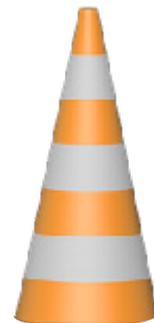These shapes have been sorted into those with flat faces and those with curved faces.

The cylinder and cone have both flat faces and curved faces.

Flat Faces

Curved Faces

Practice Sheet Mild
Naming 3-D shapes

Can you match the name to the shape?

Sphere   Cube   Cuboid   Cylinder

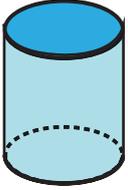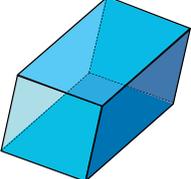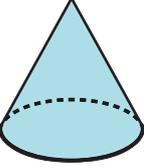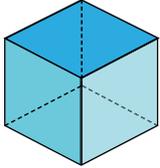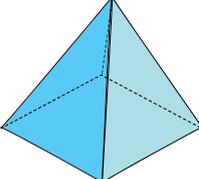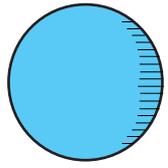Square-based pyramid   Cone   Triangular prism

Challenge

1. Write next to the shape how many faces it has.
2. Write next to the shape how many vertices it has.

Practice Sheet Hot
Describe the shapes

Complete the table:

Shape	Number of faces	Shape of faces	Will it roll, slide or do both?	Number of vertices (corners)

Practice Sheet Answers

Practice Sheet (Mild)

Triangular prism
5 faces
6 vertices

Cube
6 faces
8 vertices

Sphere
1 face
0 vertices

Square-based
pyramid
5 faces
5 vertices

Cylinder
3 faces
0 vertices

Cuboid
6 faces
8 vertices

Cone
2 faces
1 vertex

Practice Sheet (Hot)

Shape	Number of faces	Shape of faces	Will it roll, slide or do both?	Number of vertices (corners)
	3	2 circles and one curved face	both	0 vertices
	6	6 rectangles (2 of which could be squares)	slide	8
	2	1 circle and one curved face	both	1
	6	6 squares	slide	8
	5	1 square and 4 triangles	slide	5
	1	1 curved face	roll	0 vertices

Things you will need:
• A camera/phone
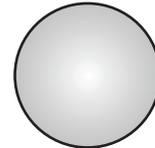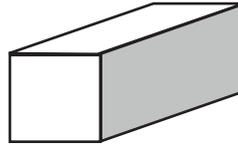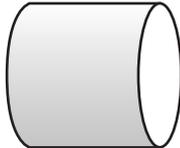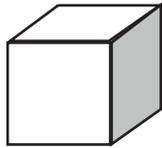
What to do:

•   Choose one of these shapes.
•   Try to find as many objects that shape as you can.
•   If you can, take photographs of them.
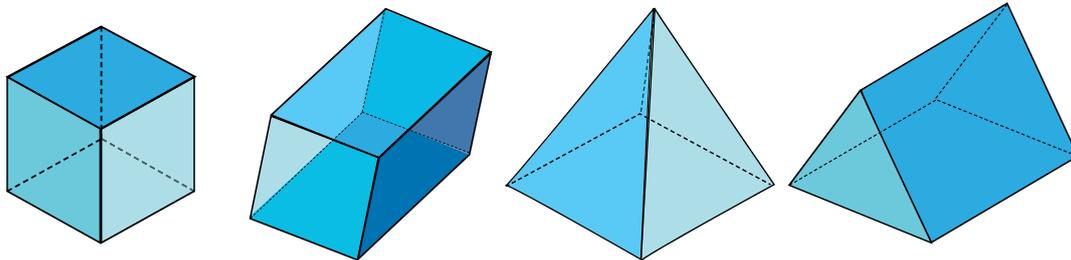

•   Try to find as many different-looking examples of that shape as you can.
•   Describe them to an adult.

•   Now choose another shape and repeat.

Investigation
Skeletons

You will need:

- Straws, lolly sticks or dry spaghetti
- Plasticine, Blu-tac or mini-marshmallows
- Scissors

- Choose one of these shapes.

- You are going to use straws/ lolly sticks/ dry spaghetti to make a skeleton of the shape, using plasticine/ Blu-tac / mini-marshmallows to join them together!

- Can you work out how many straws you are going to need?
  Are they all going to be the same length or different lengths?

- How many blobs of plasticine etc. will you need?
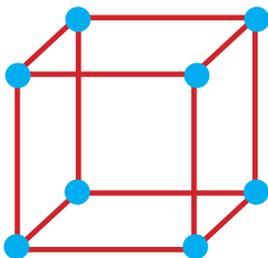
- Repeat with at least one more shape.