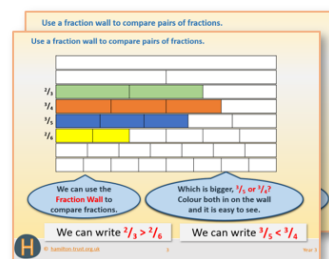


Year 5: Week 5, Day 4

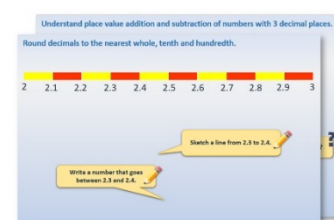
Identify, visualise, describe properties of 3-D shapes

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

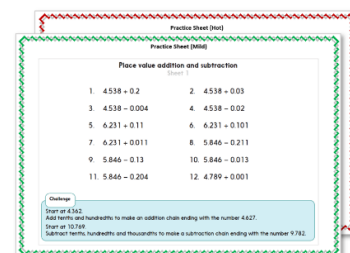
1. If possible, watch the **PowerPoint presentation** with a teacher or another grown-up.



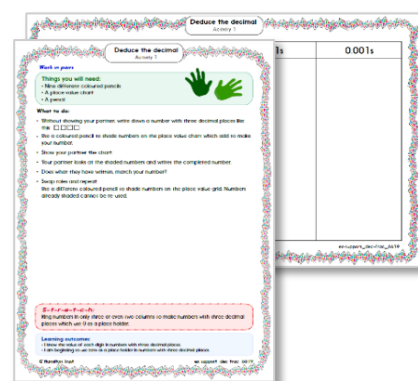
OR start by carefully reading through the **Learning Reminders**.



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?**

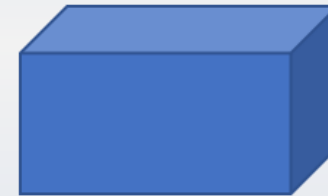


4. Think you've cracked it? Whizzed through the Practice Sheets? Have a go at the **Investigation**...

Learning Reminders

Identify, visualise and describe properties of 3-D shapes; Sort 3-D shapes according to their properties.

**? Look at the cube and cuboid.
■ What is the same about these two shapes and what is different?**



e.g.

What is different?

The cuboid has some non-square rectangular faces, it is irregular.

The cube has all squares faces, it is regular.

What is the same?

Both have the same number of faces, vertices and edges.

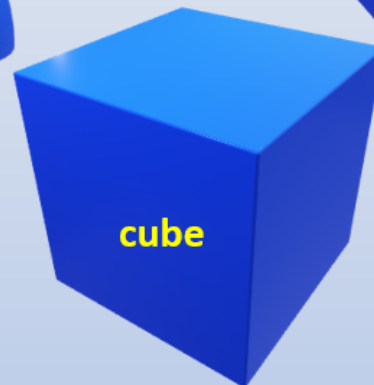
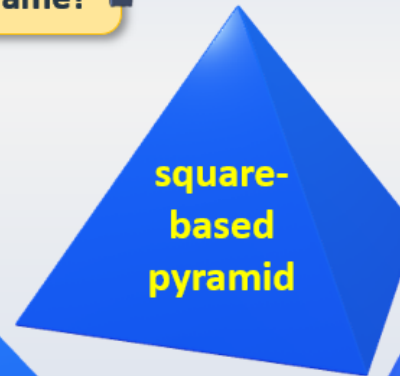
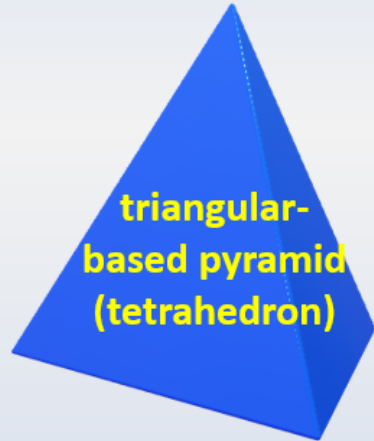
Both have all flat faces.

Both have 3 pairs of parallel faces.

Learning Reminders

Identify, visualise and describe properties of 3-D shapes; Sort 3-D shapes according to their properties.

How many of these 3-D shapes could you name?



Learning Reminders

Identify, visualise and describe properties of 3-D shapes; Sort 3-D shapes according to their properties.

Carroll diagrams use two headings that are the **opposite** of one another (mutually exclusive), e.g. 'has at least one triangular face' and 'has no triangular faces'; 'is a prism' and 'is not a prism'; 'is regular' and 'is irregular', 'has at least one pair of parallel faces' and 'has no pairs of parallel faces'.

Has at least one triangular face	Has no triangular faces

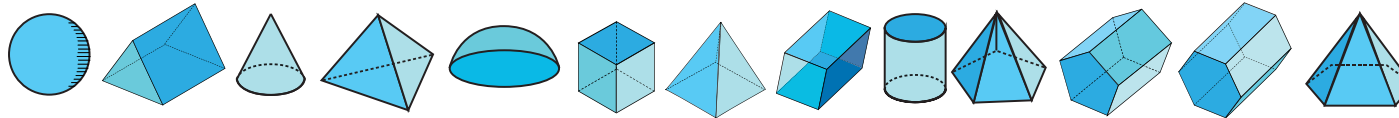
Remember that the faces are made from 2-D shapes (two dimensions) and solids are called 3-D shapes (three dimensions).

Could *you* sort the 9 shapes on the previous page into this diagram?

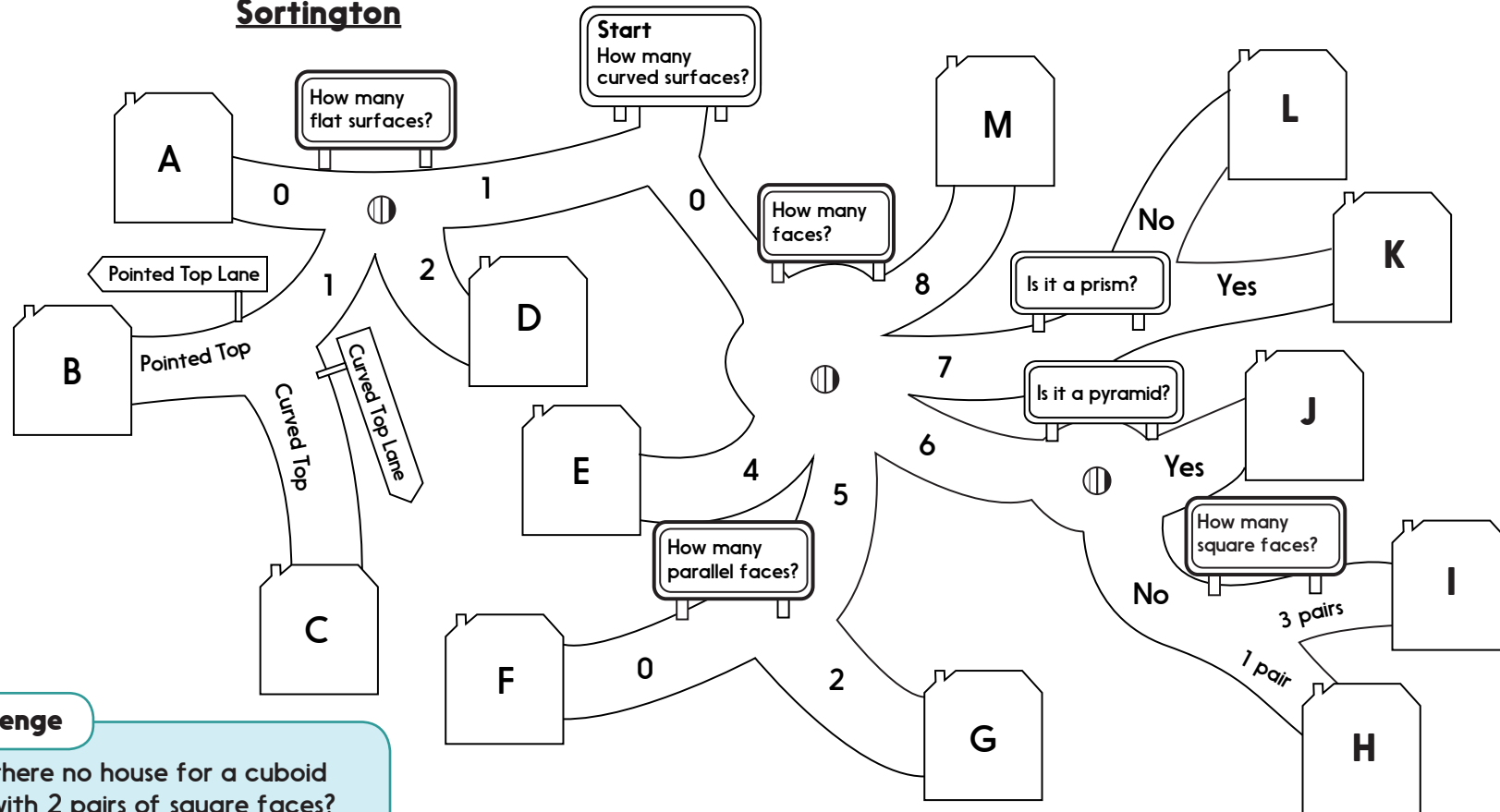
Practice Sheet Mild

Sorting shapes

The 3-D shapes go on holiday to Sortington! Work out which houses they all live in.
Write the letter and the shape's name.



Sortington



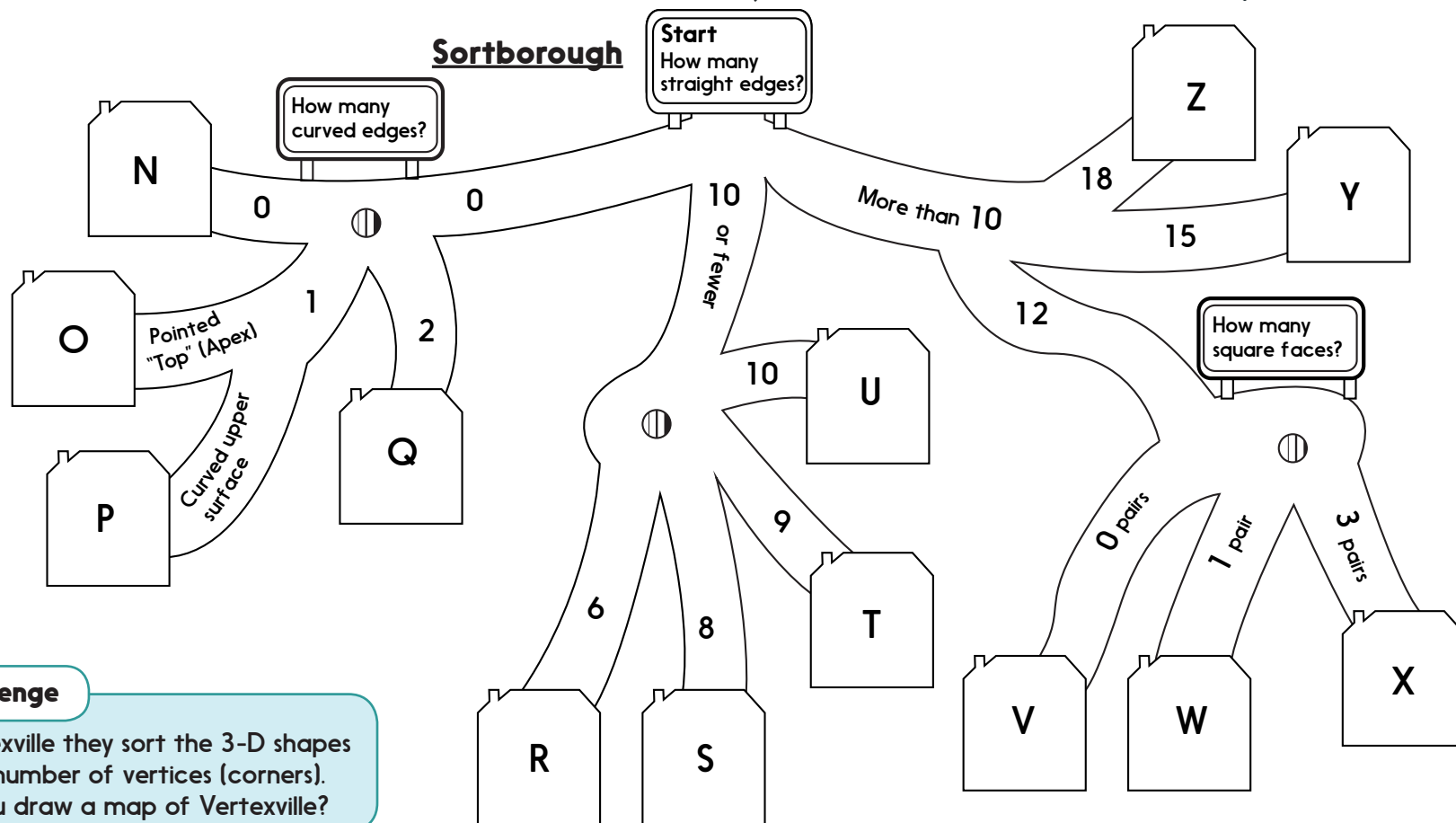
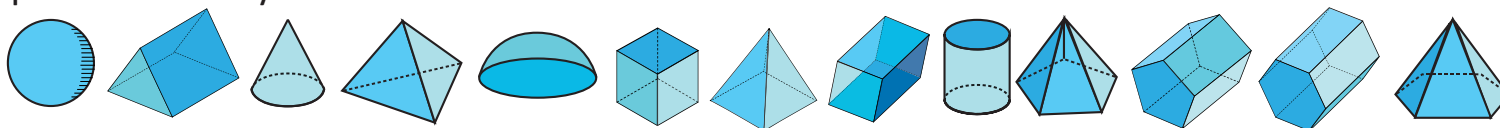
Challenge

Why is there no house for a cuboid shape with 2 pairs of square faces?

Practice Sheet Hot

Sorting shapes

The 3-D shapes go on holiday to Sortborough! Work out which houses they all stay in. Match each shape to a letter. Do you know their names?



Challenge

In Vertexville they sort the 3-D shapes by the number of vertices (corners). Can you draw a map of Vertexville?