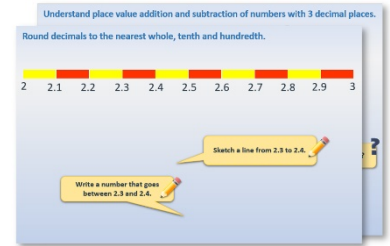


Week 14, Day 5

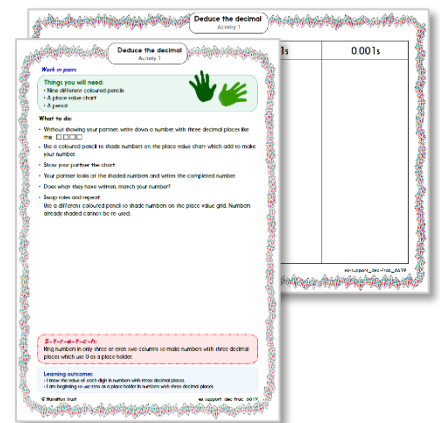
Pyramids

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

1. Start by reading through the **Learning Reminders**. They come from our *PowerPoint* slides.



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



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

Learning Reminders

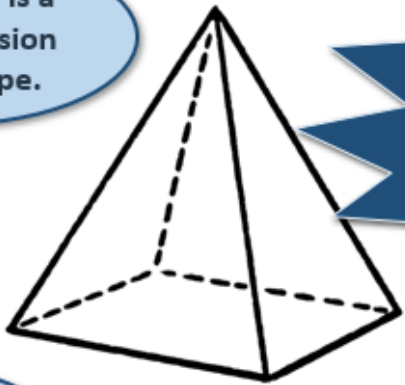
Pyramids.



Learning Reminders

Count faces, vertices and edges of pyramids.

... and here is a smaller version of the shape.



Can you describe this shape?

How many faces?


What shape are the faces?

How many vertices?

How many edges?

Count faces, vertices and edges of pyramids.

We can fill in this table.

Shape base	Number of faces	Number of vertices	Number of edges
	5	5	8

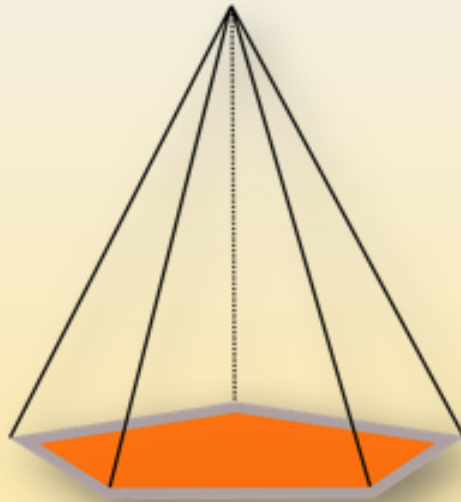
Learning Reminders

Pyramids.

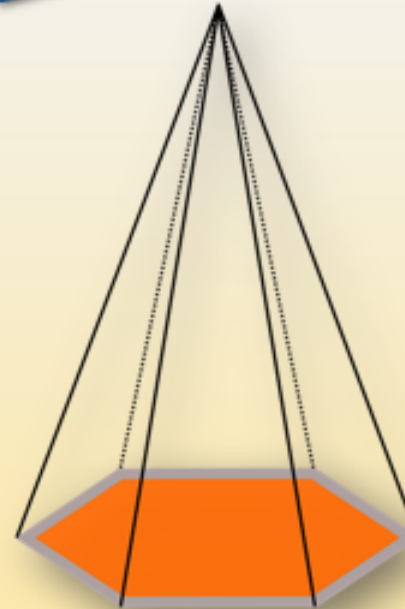
Let's look at some different pyramids...

What shapes bases do these have?

See how they have a triangular face coming up from each side of the base.



**This pyramid has a pentagon base.
It has 6 faces and 6 vertices and 10 edges.**

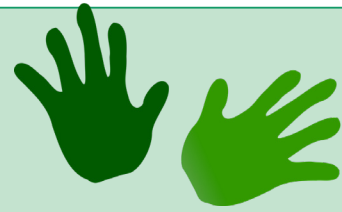


How many edges, faces and vertices does this pyramid have?

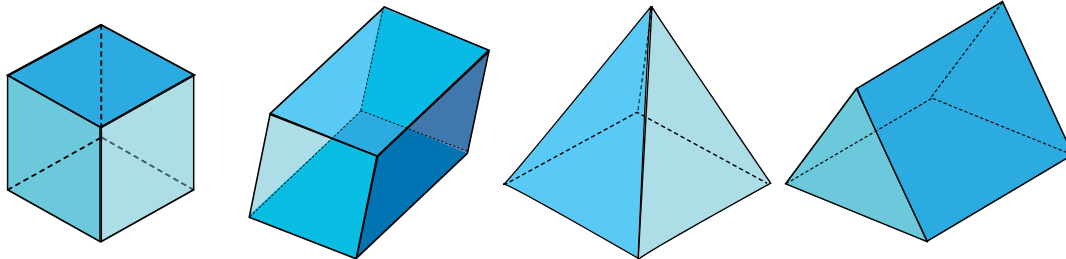
A Bit Stuck? Skeletons

Things you will need:

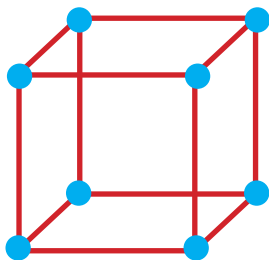
- Straws, lolly sticks or dry spaghetti
- Plasticine, Blu-tac or mini-marshmallows
- Scissors



- 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?



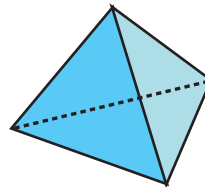
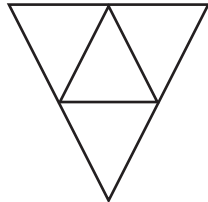
- Repeat with at least one more shape.

Investigation

Pyramids



You will need:

- Pyramid nets (see resource)
- scissors
- sticky tape
- Look at this net for a triangle-based pyramid. The triangles can be folded up to form a triangle-based pyramid or tetrahedron.



- Each of the nets below will form pyramids in a similar way. The next one is a square-based pyramid, and so on.
- Cut out nets of pyramids. Use them to make pyramids with different shaped bases.
- Count the number of faces, vertices and edges on each pyramid, then record this in the 'Pyramid properties' table below.
- Do you notice any patterns?
- After the first few, try to predict the next numbers that you will write in the table.

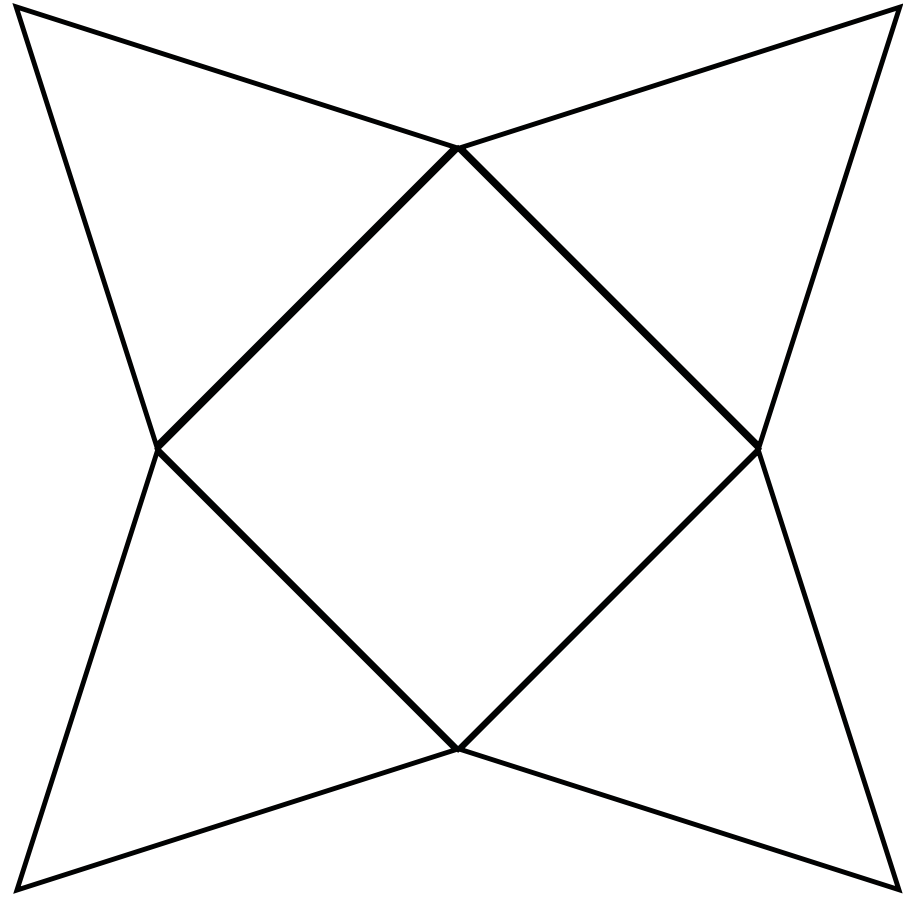
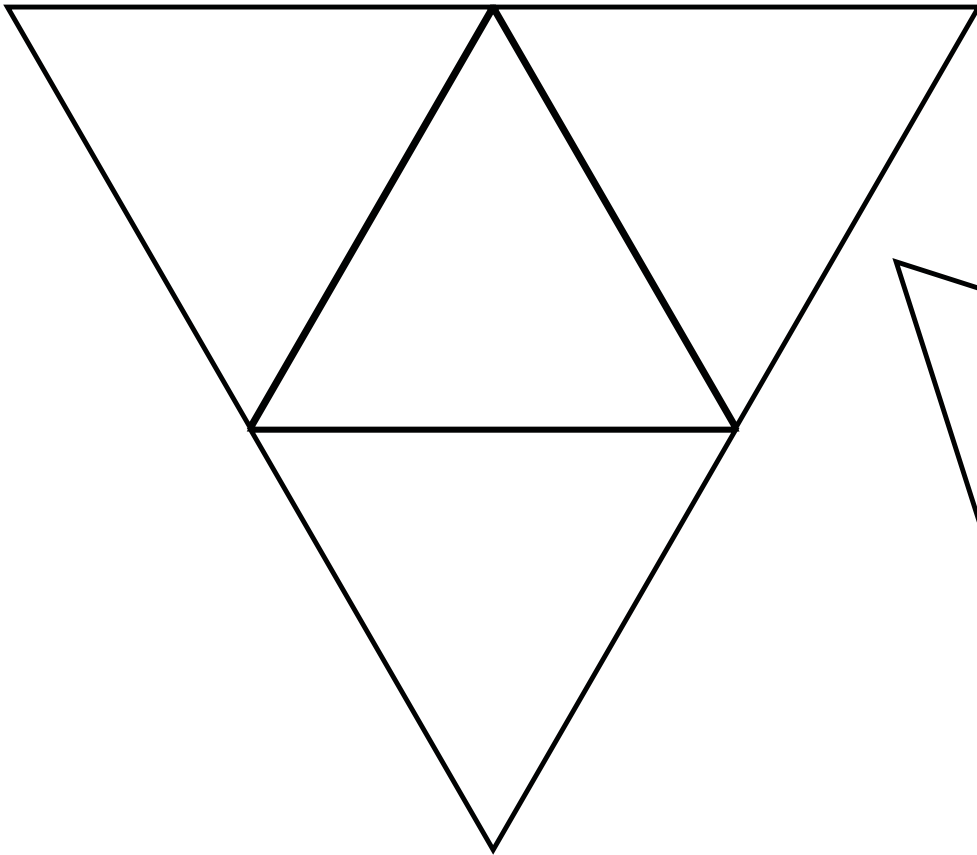
Pyramid Properties

Shape base	Number of faces	Number of vertices	Number of edges
 Triangle	4	4	6
 Square	5		

Challenge

Predict the number of faces for a pyramid with a 10-sided shape (a decagon) as its base.

Investigation Resources



Investigation Resources



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50
100 99 98 97 96 95 94 93 92 91 90 89 88 87 86 85 84 83 82 81
80 79 78 77 76 75 74 73 72 71 70 69 68 67 66 65 64 63 62 61 60 59 58 57 56 55 54 53 52 51

Investigation Resources

