**Shape Unit 4**

**Problem solving and reasoning questions**

What do we call a circular-based pyramid?

How many vertices does a pyramid with a pentagon base have?

How many edges does a prism with pentagon ends have?

True or false?

* A prism always has two parallel faces
* A pyramid cannot have any parallel faces

Sketch the net of a cuboid with no ‘lid’.

**Shape Unit 4**

**Problem solving and reasoning questions**

What do we call a circular-based pyramid? A cone.

How many vertices does a pyramid with a pentagon base have? 6. The 5 around the base plus the apex.

How many edges does a prism with pentagon ends have? 15.

5 at either end plus 5 joining the two pentagons at either end.

True or false?

* A prism always has two parallel faces False, It will always have *at least* one pair, the shape at either end, e.g. the triangles of a triangular prism but can have more, e.g. a cuboid which has three pairs of parallel faces.
* A pyramid cannot have any parallel faces. True since, apart from the base, the faces are all sloped to the apex.

Sketch the net of a cuboid with no ‘lid’. Below is an example: the net should have 5 squares joined. A straight line of 5 squares is an example of one arrangement that *doesn’t* work.