

1

Straws and clay

Give every pair straws and small balls of clay and build a triangle at the front, pressing a ball of clay onto each join so the shape holds. Then build a square beside it and have the class name both.

"How many straws do we need for a triangle? How many balls of clay?"

"Now make a square. What changed?"

2

A square with a gap in it

Build a square with four straws but leave one corner open, so the two ends do not meet, and say that you have made a square.

"I have made a square. Have I?"

"What would you have to do to fix it?"

A shape has to be closed. Point at the gap, because a student who does not see it will leave the same gap in their own.

3

Pressing the faces

Hold up a cube and press one face onto a square shape card so the class sees the match, then do the same with a cylinder and a circle card and with a rectangular prism and a rectangle card.

"What shape is this face? How do you know?"

"Does every face of the cube match the same card?"

4

Counting faces, edges and corners

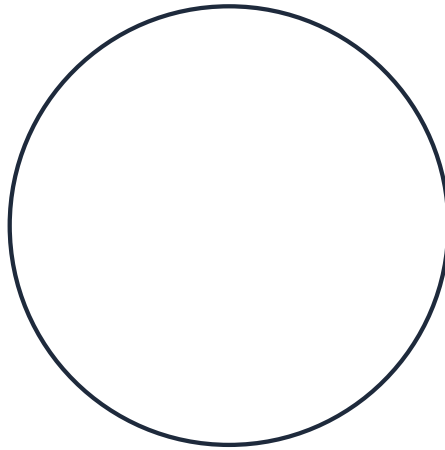
Put a counter on each corner of the cube and count the counters, then run a finger along each edge and count those, then count the faces by turning the cube over. Do the same with a cylinder, where there is nothing to put a counter on.

"Eight counters, so eight corners. Now count the edges with me."

"Where would a counter go on the cylinder?"

A cylinder has no corners. Trying to put a counter on one is how students find that out.

Print one set and cut along the dashed lines. These are the cards the faces are pressed onto.



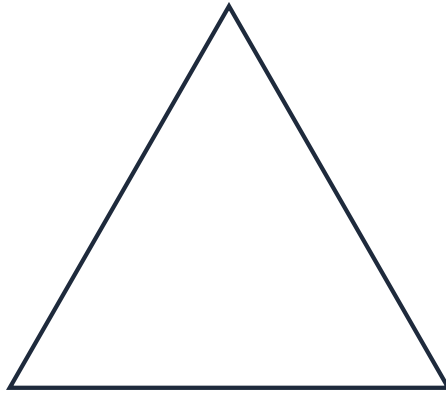
circle



square



rectangle



triangle