

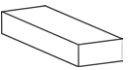











# Properties of 3D Shapes

## Challenge

3D shapes are shapes which you are able to pick up. They have faces (sides), edges and vertices (corners).

Complete the table below, identifying the different properties each 3D shape has.

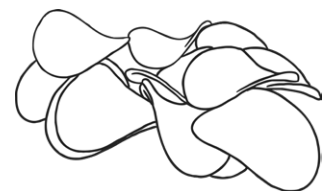
Name	Surfaces		Edges		Vertices	Picture
	Flat	Curved	Straight	Curved		
sphere						
cube						
cuboid						
cone						
cylinder						
square-based pyramid						
tetrahedron						
triangular prism						
pentagonal prism						
hexagonal prism						
octagonal prism						
octahedron						

## An Amazing Fact a Day



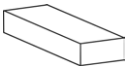




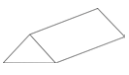
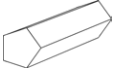



The shape of a Pringle is called a hyperbolic paraboloid.

You could also try to find out:

- how they are made;
- how many ordinary packets of crisps a tube of Pringles would fill;
- about other unusual mathematical names for 3D shapes.



# Properties of 3D Shapes

Name	Surfaces		Edges		Vertices	Picture
	Flat	Curved	Straight	Curved		
sphere	0	1	0	0	0	
cube	6	0	12	0	8	
cuboid	6	0	12	0	8	
cone	1	1	0	1	0*	
cylinder	2	1	0	2	0	
square-based pyramid	5	0	8	0	5	
tetrahedron	4	0	6	0	4	
triangular prism	5	0	9	0	6	
pentagonal prism	7	0	15	0	10	
hexagonal prism	8	0	18	0	12	
octagonal prism	10	0	24	0	16	
octahedron	8	0	12	0	6	

\* 1 Vertex is also an acceptable answer.