

Year 5 Reasoning about 3D Shapes – Guidance for Parents/Carers

Activity:

The aim of this activity is for children to practise reasoning about 3D shapes. There are three questions to complete. The first two questions allow children to practise the skill, while the third question extends them as they have to problem solve and explain their answer.

Vocabulary:

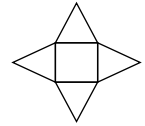
Vertices are the where sides or edges of a shape meet. For example, a rectangle has 4 vertices.

A **face** of a 3D shape is the flat or curved surface.

The **edge** of a 3D shape is where two faces meet.

A **three-dimensional shape** (or 3D) shape is any shape that has length, width and height.

A **net** is a 2D shape that you can fold to make a 3D shape. For example,



Supporting resources:

You can watch a video tutorial about reasoning about 3D shapes on kids.classroomsecrets.co.uk >> **Year 5** >> **Maths** >> **Properties of Shape** >> **Video Tutorials**.

Other resources:

If your child enjoyed this activity and wants to try more activities linked to this learning, you can sign up for £4.83 per month on classroomsecrets.co.uk/membership.

Check out our daily timetable for Year 5 home learning activities on kids.classroomsecrets.co.uk >> Home Learning Timetable.

Reasoning about 3D Shapes

1.

Name of Shape	2D Faces	Number of Edges	Number of Vertices
Square-based pyramid	1 square 4 triangles	8	5
Cuboid	4 rectangles and 2 squares (or 6 rectangles)	12	8
Hexagonal prism	2 hexagons and 6 squares (or 6 rectangles)	18	12

2.

Hexagonal prism	Tom
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	Lola
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Triangular pyramid	Kara
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	Jemal
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3. False because a rectangular-based pyramid would have a rectangular base and 4 triangles. The shape displayed is a triangular prism.