

Year 6 Computing: 3D modelling

What I will do in this unit of learning:

- Use a computer to create and manipulate three-dimensional (3D) digital objects
- Compare working digitally with 2D and 3D graphics
- Construct a digital 3D model of a physical object
- Identify that physical objects can be broken down into a collection of 3D shapes
- Design and evaluate a digital model by combining 3D objects

What I will know by the end of this unit:

What are the features of 3-dimensional shapes?

They have height, width and depth.

What does CAD stand for in computing and what is it?

CAD stands for Computer aided Design. A CAD computer program or app allows you to design a 3D object or environment in 2D and visualise it in 3D on the screen from many angles.

How can you edit objects?

You can resize the object, lift or lower it, rotate it or change its colour.

When and why is 3D modelling helpful?

It is useful during the conceptual design phase, so that engineers can create and modify models to help visualise the final product better than a 2D drawing.

Vocabulary

Object	A shape or line that can be moved, resized or modified.
Perspective	The view you have of something.
Work plane	The area used to place shapes when creating 3-d models.
Proportion	Size in relation to other objects.
Duplicate	A copy or means to copy.
Grouping	The selection of more than one line or shape.
Modify	To make changes to match a specific purpose or criteria.

