

Year 6

Creating Media 1: 3D Modelling

Prior Learning (Y5 Vector Drawing):

Learners will find out that vector images are made up of shapes. They will learn how to use the different drawing tools and how images are created in layers. They will explore the ways in which images can be grouped and duplicated to support them in creating more complex pieces of work.

Current Learning (Y6):

Learners will develop their knowledge and understanding of using a computer to produce 3D models. They will familiarise themselves with working in a 3D space and examining the differences between working digitally with 2D and 3D graphics. Learners will progress to making accurate 3D models of physical objects, which include using 3D objects as placeholders. Finally, learners will examine the need to group 3D objects, then go on to plan, develop, and evaluate their own 3D model.

Future Learning (Y7)

Learners develop their understanding of information technology and digital literacy skills. They will use the skills learnt across the unit to create a blog post about a real-world cause that they would like to gain support for. Learners will develop software formatting skills and explore concerns surrounding the use of other people's work, including licensing and legal issues.

Key Vocabulary

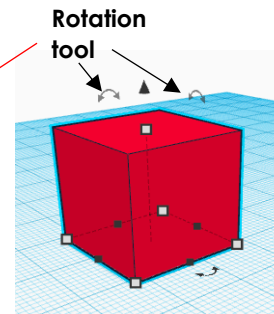
3D Space
3D object
resize
lift
rotation
position
select
duplicate
dimensions
placeholder
hole
group/ungroup



Zoom in and out

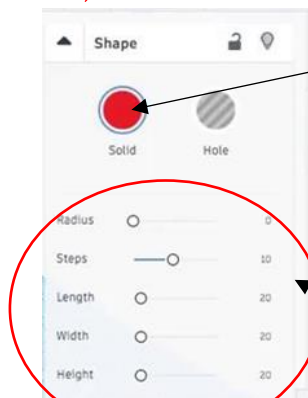


Changing the viewing angle



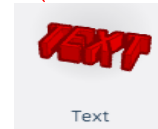
Rotation tool

TinkerCad Tools



Colour of the shape

Resizing the shape



Text tool

3D modelling

3D modelling allows us to:

- Experiment with different designs
- View designs from different angles
- Avoid making a physical model

3D modelling is used in:

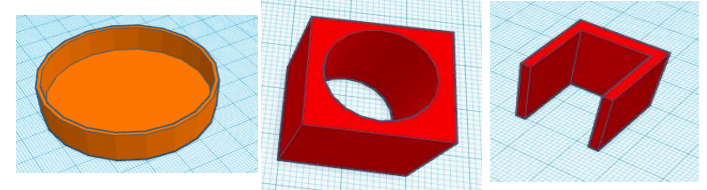
- Video games, movies, and animations
- Interior design and architecture
- 3D printing



Key Questions:

- What is 3D Modelling?
- Why do we represent 3D objects on the computer?
- How can graphical objects be modified?
- How can I select and duplicate multiple 3D objects?
- Why do I want to duplicate objects?
- How can I group a digital 3D shape and a placeholder to create a hole in an object?
- How can I modify multiple 3D objects?

Placeholders



3D objects can be used as placeholders to create holes in other 3D objects.