Computing

Lesson 5: Planning my own 3D Model

3D Modelling

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Task 1 - Grouping and modifying multiple 3D objects

Open oaknat.uk/comp-m6m5-1

Select **Copy and Tinker**

Follow the instructions on the next two slides.

Task 1 - Grouping and modifying multiple 3D objects

A	Create a hole in the cube. Remember to drag the hole 3D shape onto the solid 3D shape, then group the 3D objects.
B	Drag the sphere onto the cylinder. Group the 3D objects and drag them to the centre of the 3D space.

Task 1 - Grouping and modifying multiple 3D objects

C	Drag the triangular prism to the top of the cube. Group the 3D objects and write down the dimensions of the grouped 3D object in mm: Length: _____ Width: _____ Height: _____ Resize the grouped 3D object so that it is **double** its original size. Write down the new dimensions in mm: Length: _____ Width: _____ Height: _____
D	Rotate and drag the cone and place it on top of the cylinder. Group the 3D objects and write down the dimensions of the grouped 3D object in mm: Length: _____ Width: _____ Height: _____ Resize the grouped 3D object so that it is **half** its original size. Write down the new dimensions in mm: Length: _____ Width: _____ Height: _____

Task 2 - Designing a 3D model

Tinkercad measurements are displayed in millimetres (mm). Sketch your photo frame design.

Sketch (including dimensions)

Essential features

- Space for a photo (152 mm x 102 mm)

Desirable features

- Stand
- Attractive design
- Holds more than one photo

Possible enhancements

Task 3 - Planning a 3D model

For each stage, think about the 3D shapes required and any modifications that are needed, such as changing the size or angle of rotation.

1.	2.	3.
Notes:	Notes:	Notes:

4.	5.	6.
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