

Computer Aided Design (CAD) with Tinkercad



tinkercad.com

Open Tinkercad:

- Open either Chrome or Firefox browser.
(Internet Explorer will not run this program)
- Go to tinkercad.com



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Click on the Join Now icon at the top right of the screen

Click on “Students, join a Class”

Enter the **class code** provided by the teacher, write a copy of the code here so you can access it again.

Join with the **nickname** provided by the teacher, write a copy of the name here so you can access it again later

You can now access the “Learn” section and work through some tutorials to help you navigate the program.

Once you feel confident about using the program you can start your own project by clicking on the Create Design Button.

Create new design

Your design will automatically save as you work on it.

Designing your key-tag

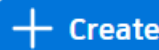


1. Click on the home button (top left)

Start your project by clicking on 3D designs

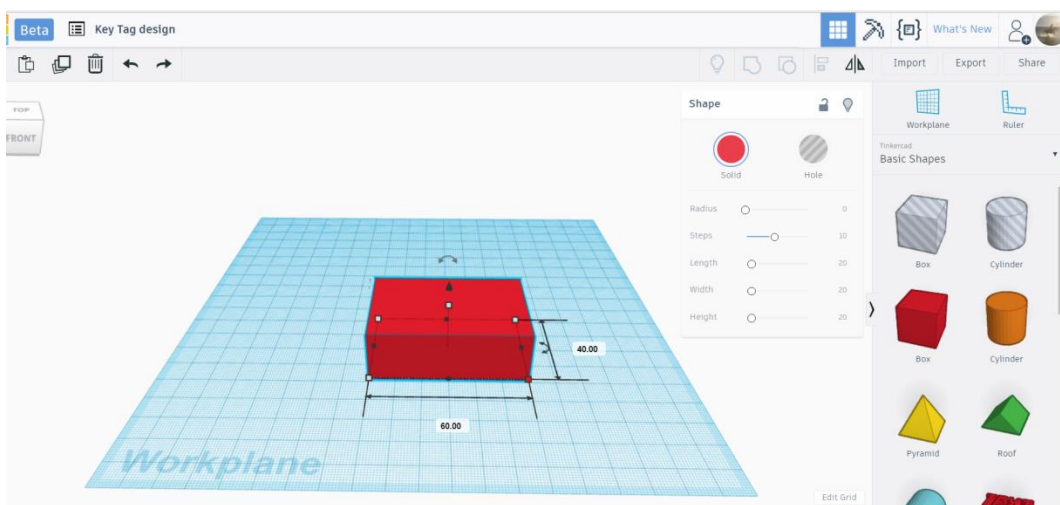


And then the create new design icon



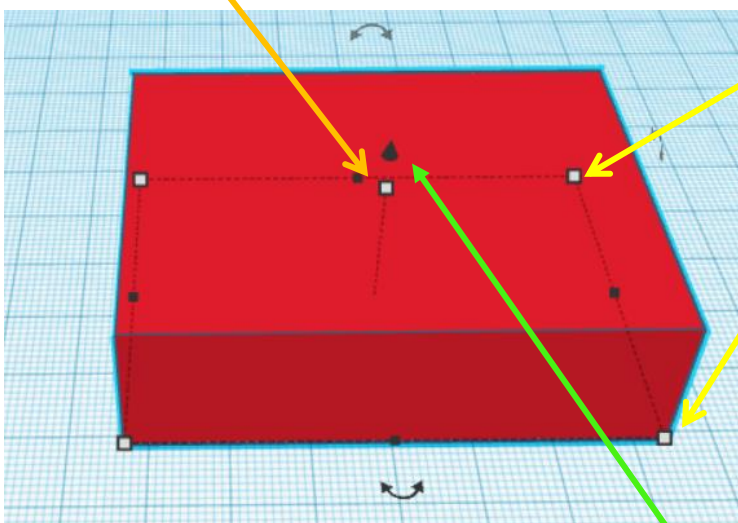
2. Work plane

- * Adjust the view of the Work plane by holding the right mouse button and moving the mouse around
- * Zoom in and out by moving the scroll wheel on the mouse

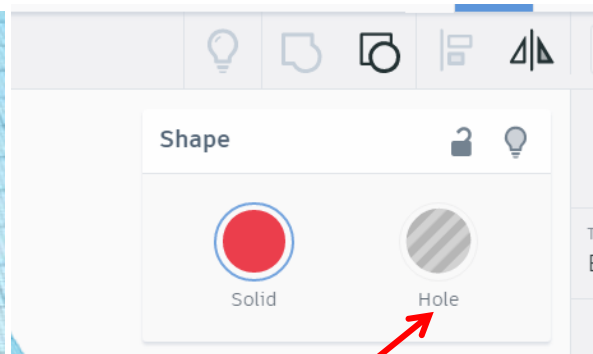
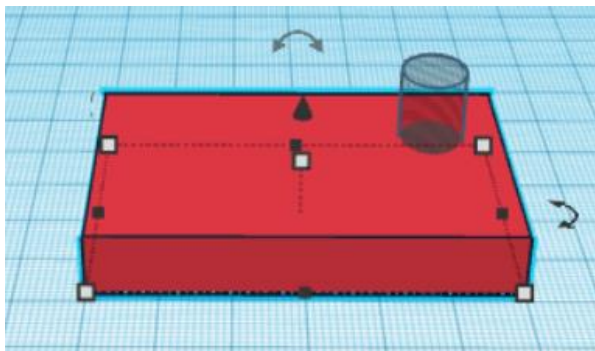


3. Drag and Drop

- * Choose an object, then drag and drop it onto the Workplane
- * Adjust the dimensions using the corner squares to get a 60 x 40 mm square
- * Adjust the height to 9mm using the central white square



* Until you have practised with this program **avoid using the central black cone** shape as this lifts and lowers the object and can leave it floating in mid-air.



4. Making a hole and adding text

- * Drag and drop a new shape onto the Workplane
- * Select the new object and change it into a hole
- * Adjust the size of the hole (approx. 10 x 10mm) and place it inside your object making sure it goes right through.



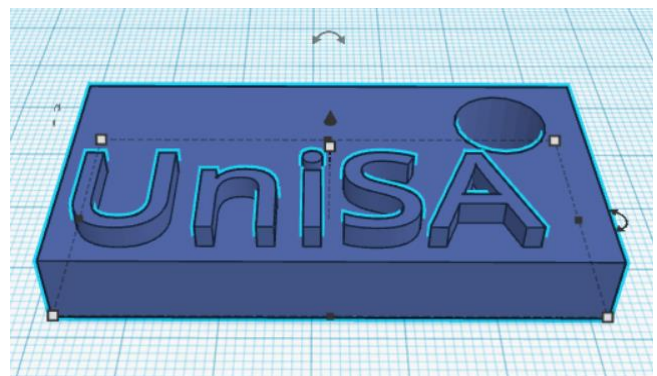
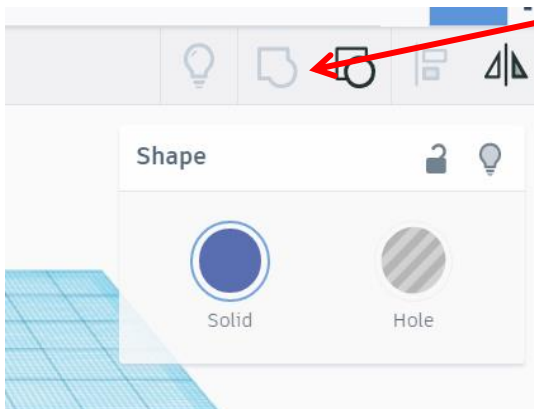
- * Add text and other features to your design.

Make sure text is not the same height as the base shape or it will not be visible when printed.

To add text drag and drop the text icon onto the workplane and then adjust the text, font and height.

5. Grouping the object

- Highlight both objects (by making dragging the mouse to create a red rectangular perimeter) you then click **Group** or press **Control + G**



The colour in Tinkercad is irrelevant, it is the printer plastic that determines the colour.

6. The design will automatically save to the classroom account. If you also need to save a copy click on "Export" and save the file in the format .stl