

Design Engineering and Product Design summer tasks 2025

Task 1

- Create an Onshape educational account:
 - [Signup for Onshape for Education](https://www.onshape.com/en/education/signup) (<https://www.onshape.com/en/education/signup>)
- Onshape runs in a web browser so you don't need to install any software
- Complete the following course
 - [Onshape Learning Center](https://learn.onshape.com/learn/learning-path/onshape-fundamentals-cad) (<https://learn.onshape.com/learn/learning-path/onshape-fundamentals-cad>)
- Print your Certificate of completion

Extension

Have a go at some of the other tutorials on the Onshape courses page and present them to your teacher in September.

Task 2

Developing your sketching is an area we will be looking at. To get you started look at Spencer Nugent sketch-a-day on You tube. You will need paper and drawing equipment

Here is a link to the basics section

<https://www.youtube.com/playlist?list=PLjZ8ePITBc0KXHkDGMOHhumpTqPv3TA8r>

1. At first you may struggle with this but persevere you will soon improve. Have a go at some of the basic sketching work, videos 1-4. Then pick at least 3 of his product videos and have a go at drawing the products. Organise and bring in your design work in the same folder as the CAD work.
2. Take an object that you can disassemble (something that might be thrown away).
 - a. Have a go at drawing it in 3D from different viewpoints.
 - b. Take it apart and draw an assembly view showing how the components fit together.

The best way to develop your drawing is to Practice, practice, practice so feel free to do more sketches and bring in to show us.

We would strongly recommend a Visit to the Design Museum for Product Design students or the science museum for Design Engineering students.

Equipment you will need for sketching:

- Papermate medium point black pen
- Black Sharpe
- Black Biro for sketching
- 0.5 / 0.7 technical drawing pen
- 2H and HB Pencil
- Clean rubber
- Extra: Marker pens
- Sketchbook – bought in house through the department