

Year 7 Design Technology

In year 7 Design & Technology students are exposed to new experiences through the use of exciting and interesting tools, equipment and materials. In order for them to use these safely and confidently we use a phased approach starting with very structured projects with simple hand tools being used through to independent working with multiple tools and machinery. These projects are based on practical skills, CAD skills, material knowledge, drawing skills, and independent problem solving skills.

Year 7 Curriculum	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
Topic(s)	<p>Topic Title Photo Frame Students are introduced to Health and Safety. They produce an acrylic photo frame which allows them to demonstrate how to file and mould plastic using heat.</p>	<p>Topic Title Coaster Students gain a working knowledge of how to use 2D Design or Google Sketch up. They produce a design on the computer (CAD) and then convert this into a real product by using CAM. This project allows students to produce individual designs and use new technology in the form of a laser cutter.</p>	<p>Topic Title Coaster Students gain a working knowledge of how to use 2D Design or Google Sketch up. They produce a design on the computer (CAD) and then convert this into a real product by using CAM. This project allows students to produce individual designs and use new technology in the form of a laser cutter.</p>	<p>Topic Title Drawing Skills Students are shown how to sketch more accurately using a variety of techniques and media. Simple shapes are created using 3D techniques and rendered to simulate wood metal and plastic. Students develop these skills and sketch more complex objects and products.</p>	<p>Topic Title Year 7 Desk Organiser Students use the drawing skills they have just learnt to design a personal organiser. They use coping saws, tenon saws, a marking gauge, pillar drill and the sander in the production of the organiser. The materials used are pine and MDF with students applying a wood stain to the finished product.</p>	<p>Topic Title Year 7 Desk Organiser Students use the drawing skills they have just learnt to design a personal organiser. They use coping saws -tenon saws marking gauge, pillar drill and the sander in the production of the organiser. The materials used are pine and MDF with students applying a wood stain to the finished product.</p>
Assessment	Health and Safety in workshop test. Practical work and Health and Safety is assessed.	Design work is assessed.	Design work is assessed.	Drawing work is assessed.	Design skills assessed through classroom work.	Independent working skills, Health & Safety and practical work is assessed.

Independent Work

Photo Frame -Tool information sheet in which students draw and explain what tools and equipment they have learnt to use.

Coast - Research work carried out on what Art Deco is to understand the design movement.

Drawing Skills- Students practice rendering skills they have learnt at school with a number of products and materials.

Desk Organiser - Students develop design ideas/modeling skills for the desk organiser which they start in school