



Key Stage 3 Design Technology Department 2023-2024

	YEAR 7	YEAR 8	Year 9
Term 1	Year 7 students will be introduced to Design Technology at KS3. They will cover Health & Safety expectations in the workshop and in the Kitchen. They will also undertake a BW Trust bench-mark test. Retrieval Practice KS2 task will also be undertaken.	Year 8 Students will conduct a mini NEA food research project on a chosen country and culture. This will give students an insight to the Food NEA project, should they choose to study Food at GCSE.	Year 9 Students will be introduced to the V&A Innovate competition and students will work in teams to create a solution to a real world problem that they will identify and design a solution for. This is a 6 week research design task.

<p>Term 2 & 3</p>	<p>Students will learn about Papers and practice some technical drawings. They will explore Perspective drawing, Isometric drawing and CAD drawings. Students will learn about Timbers and respond to a set design brief from the Italian Manufacturer Alessi. Students are required to make & evaluate a wooden flatpack articulated LED light. The prototype LED light must be based on the character 'Snowy' from book 'The Adventures of TinTin' by Belgian cartoonist Geore Prosper Remi (pen name 'Herge')</p> <p>Students will rotate between subject specialists at the end of Term 3.</p>	<p>Students will learn about Polymers, CAD and CAM and Coding within this project about New and emerging Technology. They will learn about 2D design to create a CAD design that will be laser cut. They will also learn about fossil fuels and sustainable energy sources. Coding skills are developed through application to the driverless car, which is linked to Elon Musk and Tesla.</p> <p>Students will rotate between subject specialists at the end of Term 3.</p>	<p>Students develop an understanding of the impact diet and lifestyle has on our health and well-being. Students revisit health, safety, and food poisoning, understand energy balance, food labelling and marketing and consider how farming effects the environment and our health. Students explore recipe modification, healthy cooking methods and how diet influences our well-being. Students learn to cook a variety of 'fakeaways' (healthy homemade takeaway dishes).</p> <p>Students will rotate between subject specialists at the end of Term 3.</p>
<p>Term 4 & 5</p>	<p>Students are introduced to basic cooking skills, health and safety in the kitchen, hygiene, and nutrition. We explore what a healthy balanced diet involves through studying the eatwell guide and learn to cook a variety of predominantly savoury dishes. Students build on basic cooking skills by cooking a range of typical dishes from around the world. They will understand the impact of food miles on our environment and compare healthy eating models in different countries.</p>	<p>Students will learn about Textiles and Sustainability. They will understand how fabric and fibres are made and its impact on the environment. They will then learn to use the sewing machines to create a functional bag from recycled fabrics.</p>	<p>Students will learn about Metals and respond to a set design brief that requires students to create an Arts & Crafts inspired multi-material mobile phone holder, which includes working with Timbers, CAD and CAM & Polymers as well as copper and enamel. Health and Safety in the workshop and working with a variety of workshop tools and equipment will prepare students for year 10 should they choose to specialise in DT or Engineering at GCSE.</p>