

Design Technology Curriculum Overview - Year 8

	Unit	Details
Autumn One	Theory	Pupils will develop an understanding of timbers theory; they will be able to accurately identify and categorise manmade, soft and hard wood. Pupils will understand the properties and limitations of using different types of timber within their designs. Pupils will understand the many processes timber goes through to become a final product, and how these can affect the properties of the wood itself.
Autumn Two	Design	Pupils will conduct market research and a mood board to identify and actualise design ideas. Pupils will create 3 initial design ideas and will develop accurate drawing and timber rendering techniques to create 3D designs. Pupils will annotate designs taking into consideration the processes they will be using and the target market they are designing for.
Spring One	Make	Pupils will then confidently use a range of tools and machinery safely and appropriately to produce a bug hotel that clearly represents their design work. Processes will include accurately measuring using a ruler and tri-square, cutting using a tenon saw and bench hook and pinning using a hammer.
Spring Two	Evaluate	Pupils will now reflect on the whole process of creating their bug hotel, from initial research to designing to making. They will make thoughtful comments on each stage of the process identifying strengths and weaknesses. They will then think about the wider context of product design and begin to explore ideas for packaging and merchandising their product. Pupils will be introduced to electronics theory in order to understand series and parallel circuits and the basic use of electronics within design which they will then apply to their bug hotel design.
Summer One	Food Preparation & Nutrition Theory	Pupils will begin by exploring different food groups and how they contribute to a healthy and balanced diet. They will then investigate the different ways food is grown, reared and manufactured. Pupils will discover and define the importance of sustainable and organic produce, understanding the environmental impact food has. Pupils will receive an introduction to food safety and hygiene, exploring biological, physical and chemical contamination and will explore the ways in which we store and cook food have an impact on its safety and our health.
Summer Two	Food Preparation & Nutrition Processes and Development	Pupils will apply their understanding of food safety and hygiene in order to prepare and cook food safely. They will receive a core recipe which pupils will adapt to suit their own personal preferences. This will include the safe and precise use of knife skills, following a recipe accurately, following safety measures in order to apply heat, using the hob to cook food for the appropriate amount of time and at the optimum temperature and lastly following guidance on safe storage of food, demonstrating an understanding of how temperature impacts the development of bacteria.