DESIGN & TECHNOLOGY

The Technology curriculum is broken down into 3 sub-areas of Computing, Design & Technology and Food Technology. Within each sub area the assessed competencies centre around Designing, Making and Knowledge, which will be formally assessed during each rotation. Each student will explore the curriculum as a 12-week rotational scheme, enabling a breadth of skills to be experienced creatively in the whole of Key Stage 3.

	Mid-Year Expectations	End of Year Expectations
Higher Prior Attainer	• Design innovative, functional, and appealing products that respond to the needs of the intended user. • Students can evaluate their work against their original design analysis and suggest ways of adapting and improving their work. • Students will be able to select and explain the reasons for, in stage order, the use of specialist tools to manufacture their product. • Create a variety of 2D and 3D ideas that shows detailed rendered and annotated designs and the use of key terminology to communicate ideas and concepts.	• Students recognise that Design and Technology helps us to understand and negotiate our emotions and place within our evolving technological world. • Students can articulate the social, moral, global, and environmental impact design and technology has on the world. • Follow safe and hygienic working practices consistently • Students will test, evaluate, and refine their solution to suit a target market or client and consider the environmental impact of the product. • Students research clearly shows trends and patterns in the design of similar products and the work of other designers through product analysis. • Students uses a wide range of tools, equipment and materials including ICT (including CAD/CAM) to produce a product with high levels of precision.

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	Mid-Year Expectations	End of Year Expectations
Middle Prior Attainer	• Students use research and exploration to identify and understand user's needs. • Students identify and solve design problems and understand how to reformulate problems given to them. • Students will be able to select and justify the order and use of specialist processes to manufacture their product. • Students will understand the different properties and be able to select between different materials based on a wide number of properties of natural and man-made timbers used to manufacture their product. • To understand the value of Design and Technology in a society of different cultures and professions, students should be able to identify and target a specific client.	• Students will be able to understand the importance of Design and Technology as a means of communication, health & safety, and personal growth. • Students will demonstrate how to incorporate features from design eras into their design work. • Students will experience a range of skills in different materials areas, including CAD/CAM, to help them solve challenges in the real world. • Students will test, evaluate, and refine their solution to suit a target market or client. • Students will select from and use specialist tools, techniques, processes, equipment, and machinery precisely and use 3 or more skills to complete work.
Lower Prior Attainer	• Select from and use a wider range of materials, components and consider their properties and their intended use. • Students can select specialist tools, techniques, processes, equipment, and machinery and use 2 or more skills to complete work. • Students will be able to use CAD software to model a range of simple design solutions. • Students can test their product and identify the successful and unsuccessful areas of their work.	• Students will be able to understand the importance of Design and Technology as a means of communication, health & safety, and personal growth. • Students will consider primary and secondary users in their design work. • Students can work with some independence to produce a product using different materials and processes. • Students will test and evaluate their work and identify how it can be improved to suit a target market or client. • Students will select from and use specialist tools, techniques, processes, equipment, and machinery precisely and use 2 or more skills to complete work.