Design Technology Curriculum Overview - Year 7

	Unit	Details
Autumn 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.
Autumn 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.
Spring One	**Theory**	Pupils develop an understanding of key health and safety practices within the DT workshop and create a poster to apply their knowledge and develop their skills in graphic design and communication. Pupils then learn about metals theory; they will be able to accurately identify alloys, ferrous and non-ferrous metals. Pupils will understand the properties and limitations of using different types of metal, and will develop an understanding of the products each type of metal is used for.
Spring 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 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.
Summer One	**Make**	Pupils will then confidently use a range of tools and machinery safely and appropriately to produce an aluminium key ring that clearly represents their design work. Processes will include cutting using a junior hacksaw, filing using a range of flat, half-round and needle files, polishing using wet and dry paper and making holes using the pillar drill.
Summer Two	**Evaluate**	Pupils will now reflect on the whole process of creating their key ring, 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.