Design and Technology

	Food and Nutrition	Textiles	Resistant Materials
What do we teach in Technology?	**Baking, V is for Vegetable/Vegan dishes, British and international cuisines, Food Safety/Food hygiene/kitchen hygiene, Health & Safety in Food room, Introduction to the kitchen.**	**Cushion project, Monster doll and Tote bag, Health & Safety in Textiles Introduction to Sewing Machine, applique and embroidery.**	**Projectile Project, Audio Amplifier and Clock, Health and safety in Design Technology, Introductions to tools and machinery in the workshop.**
How does this meet the National Curriculum?	**This topic covers the following aims of the NC:** Students will demonstrate and apply knowledge and understanding of designing and making principles in relation to the following areas: • How to plan and modify recipes, meals and diets to reflect the nutritional guidelines for a healthy diet. • General practical skills (whisking, beating, folding, sieving, creaming and rubbing in all incorporate air into the mixture). • The scientific principles underlying these processes when preparing and cooking food. • To understand why Chef's, conduct market research. • To gain the knowledge and understanding of what a design specification is. • To apply all subject specific knowledge gained through the completion of an End of Unit test.	**This topic covers the following aims of the NC:** Students will demonstrate and apply knowledge and understanding of designing and making principles in relation to the following areas: • To understand Health & Safety Rules in Textiles. To be able to name and identify the different parts of the sewing machine. • To understand how to plug in and set up a sewing machine. • To understand how to thread up a sewing machine. • To understand and be able to identify the difference between manmade/ synthetic fibers and organic/natural fibers. • To be able to name and identify the different methods that fabric can be constructed from spun fibers. • To apply all subject specific knowledge gained through the completion of an End of Unit test.	**This topic covers the following aims of the NC:** Students will demonstrate and apply knowledge and understanding of designing and making principles in relation to the following areas: Investigation, primary and secondary data • environmental, social and economic challenge. • The work of others. • Design strategies. • Communication of design ideas. • Prototype development. • Selection of materials and components: wood, plastic and metal. • Specialist tools and equipment. • Specialist techniques and processes. • To apply all subject specific knowledge gained through the completion of an End of Unit test.
Why does this knowledge matter?	Demonstrate effective and safe cooking skills by planning, preparing and cooking using a variety of food commodities, cooking techniques and equipment. During the preparation and cooking process students to have knowledge and ability to review and make improvements to recipes by amending in cooking practical lessons which help towards options in GCSE Food Preparation and Nutrition.	To understand and be able to identify the difference between decorative techniques and manufacture. These skills cover the very foundations of design within Textiles Design. It also lays the groundwork for key vocabulary, theory and drawing skills required by all designers, inventors and artists.	Demonstrate their understanding that all design and technological activity takes place within contexts that influence the outcomes of design practice. To use imagination, experimentation and combine ideas when designing. To develop the skills to critique and refine their own ideas whilst making final products. To develop a broad knowledge of materials, components and technologies and practical skills to develop high quality, imaginative and functional prototypes.
Why do we teach in this sequence?	Vocabulary is taught first to ensure that this can be understood when used in subsequent lessons. Baking chopping, frying, taste testing are skills used in all practical lessons. To gain further knowledge and understanding of the most appropriate ingredients, processes, cooking methods and portion sizes when creating dishes.	Different skills using the sewing machine are practiced in a series of lessons to gain further knowledge and understanding of the technique of Applique, pattern cutting and using the sewing machine in different ways. To further apply knowledge through the creation of a flow diagram showing the production of a product within industry. Finally producing a toy, cushion and bag which relates to the design specification. Before moving onto more complicated making and developing skills using applique and embroidery.	To gain further knowledge and understanding of the Pillar drill, belt sander, polisher, strip heater, using various saws on wood, metal and plastic. To further apply knowledge showing the production of a product within industry. Finally producing a siege engine, audio amplifier and clock to which relates to the design specification. Students will be able to demonstrate safe working practices in design and technology. Complete design and make it projects and have a clear understanding of different tools and machines within the workshop.
What career links are made?	Popular careers for people with Food Preparation and Nutrition qualifications include: Chef, Food scientist, Dietitian, Nutritionist, Restaurant manager, Food technologist, Nutritional therapist.	Popular careers for people with Textiles and technology qualifications include: fashion designer, tailor, product designer, architect, software engineer, fashion buyer, textiles fabric designer, hair stylist and makeup artist.	Popular careers for people with design and technology include: Industrial engineer, product designer, furniture designers, computer games designer, Graphic Designers, architect, advertising.
Students will be taught all three Technology disciplines, on rotation, across KS3.			

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