Design & Technology

Please note students are taught on a rotation basis so may start with any of the following projects in the Autumn Term

Topics taught			
Year Group	Autumn Term	Spring Term	Summer Term
Year 7	**Let's Get Cooking** Healthy eating and making a range of savoury foods. Learning basic food preparation skills Functions and sources of nutrients, ways to get your 5 portions of fruit and vegetables a day, healthy cooking methods	**Pop-Up Book** Designing and making a pop-up book inspired by the designer Robert Sabuda. Learning paper engineering and developing literacy skills.	**Fridge Magnet Project** Looking at the properties of plastics and the processes used to cut and shape them. Designing and making a fridge magnet which will be blister packaged and inspired by nature. The fridge magnet will be suitable to be sold in a gift shop.
Year 8	**Fill The Gap** Designing and making a snack suitable for teenagers. Researching ingredients that provide slow releasing carbohydrates and fibre, incorporating these into a healthy snack product. **Ready Steady Cook** Based on the TV programme students are to design and make savoury food dishes using a selection of randomly chosen ingredients.	**Mood Light** An electronics project, introducing students to control. Students will solder their own light circuit and design and make the housing for this. They will choose a design movement and incorporate key features of this into the design and decoration of their housing.	**Scrap Monster** Looking at the 6 Rs and ways we can reduce our carbon footprint. Designing and making soft toy monster using a pattern and learning different types of hand stitching. The product will be made using old socks, materials etc. that would otherwise be thrown away.
Year 9 D&T	**Wind Chime project** Designing and making a wind chime for a client's garden. Learning how to create innovative ideas for a wind chime using wood working tools, equipment and plywood as the main material.	**Steady Hand Game project** An electronics project based on learning how more complex circuit systems work and are put together. Learning how to use the vacuum former, wood working tools and soldering circuit components.	**Skills Box project** Making a box frame from pine consisting of 4 different wood joints and then transforming this frame structure into a creative product for a personalised purpose. Learning how to design using 2d and 3d CAD programmes and creating a unique product.

Year 9 Food	**First Half Term: Use Your Loaf – Bread Project** Students gain an understanding of bread products eaten by different cultures. Investigating the functions of each ingredient used in bread. Students will learn to make different types of bread. Students will design and make their own bread product **Second Half Term: Up, Up and Away – International Cuisine** Students will learn about traditional cuisine of different countries Through practical activities, students will develop their making skills	**First Half Term: Up, Up and Away continued** **Second Half Term: The Great British Menu** Students will learn to prepare are range of traditional British dishes e.g. Sticky Toffee Pudding, Cottage Pie. Students will learn the functions of macro and micronutrients in the body. Students will learn the working properties of the ingredients used in a range of dishes e.g. shortening, aeration, producing a foam	**First Half Term: The Great British Menu (Contd)** **Second Half Term: Dietary Needs** Students will understand the reasons why people have specific dietary needs Students will research the following: Coeliac, Lactose Intolerant and Vegan Students will make dishes that meet specific dietary requirements

Year Group	What parents can do to support learning	Useful links and reference materials	Revision for end of Year Exam
Year 7	• Help students fully prepare for food practical lessons by ensuring and an Apron, Container and T Towel are supplied. • Ensure all the only ingredients brought into school are fresh fruit and vegetables and kosher fish. • Encourage students to evaluate their practical work the same day whilst it is still fresh in their mind. • Encourage students to be independent learners.	www.fairtrade.org.uk www.bbc.co.uk/food/recipes www.thenhs.co.uk/livewell www.goodtoknow.co.uk/recipes www.robertsabuda.com	There will not be an end of year exam
Year 8	• Help students fully prepare for food practical lessons by ensuring and an apron, container and T Towel are supplied. • Ensure all the only ingredients brought into school are fresh fruit and vegetables and kosher fish.	www.footprint.wwf.org.uk http://www.bbc.co.uk/food/recipes	There will not be an end of year exam

	• Encourage students to evaluate their practical work the same day whilst it is still fresh in their mind. • Encourage students to be independent learners.		
Year 9	• Encourage students to be independent learners and practice using CAD programmes such as Tinker CAD, On Shape or Google Sketch Up for design work and development of ideas. • Ensure students are fully prepared for all Food Practical lessons. • Ensure students have an Apron, Container and T towel for every food practical • Ensure all the only ingredients brought into school are fresh fruit and vegetables and kosher fish.	https://www.tinkercad.com/ https://www.thenational.academy/teachers/programmes/design-technology-secondary-ks3-l/units https://www.bbc.co.uk/bitesize/subjects/z23vkhv	There will not be an end of year exam