

Design & Technology – Key Stage 3 overview (Year 7)

Materials - Wood	Materials - Fabrics	Food Preparation and Nutrition	Materials - MDF	Materials - Wood
<i>Wooden Robot</i>	<i>Lizard Screen Cleaner</i>	<i>Healthy Snacks for a Teenager</i>	<i>Mechanisms and motions project</i>	<i>Wooden Robot</i>
This project enables students to learn about hand tools and workshop machinery and how to safely and accurately use them to create a wooden robot.	This project enables students to learn about fabric and its construction and touches on lots of different skills which they will advance in year 8. They will use these skills to create a hand printed fabric Lizard Screen Cleaner.	This project enables students to learn about the principles of the Eatwell plate and how to apply these to a healthy lifestyle when linked with the 8 tips for healthy eating. Students cook predominantly savoury products and have an opportunity to adapt their own recipes.	In this topic students learn about the many different motions and mechanisms. This is achieved by making a mechanical grabber based upon a theme students design.	This project enables students to learn about hand tools and workshop machinery and how to safely and accurately use them to create a wooden robot.
BREAK DOWN OF LEARNING				
<ul style="list-style-type: none"> The names and safe use of hand tools found in the workshop. The names and safe use of machinery found in the workshop. The working properties of softwood and hardwood. An overview of different plastics and metals. How to produce detailed design ideas. 	<ul style="list-style-type: none"> Learn how to make felt and how to recognise other fabric constructions. Traditional Indian block printing and create their own lino print. A variety of Hand Stitching techniques. Different ways of researching a topic to use as inspiration and for analysis. 	<ul style="list-style-type: none"> The principles of the Eatwell plate Key nutrients and why our bodies need them Functions of ingredients and energy balance. Sensory analysis of foods Basic cooking skills including knife skills, using the cooker safely 	<ul style="list-style-type: none"> What the different motions and mechanisms are and how they are used in the real world. How to design and make using CAD CAM technology What ergonomics is and how to apply it to designs How to develop creative ideas and analyse their success as well as what modifications could improve them further. How to evaluate products in order to learn what makes them successful and how it could be modified. 	<ul style="list-style-type: none"> The names and safe use of hand tools found in the workshop. The names and safe use of machinery found in the workshop. The working properties of softwood and hardwood. An overview of different plastics and metals. How to produce detailed design ideas.