

Alcester Academy Curriculum Planning: Key Stage 3

Department: <i>Design and Technology</i>							
Term	Topic/Subject	Assessment Objectives and Knowledge (include differentiation)	Knowledge acquisition	Skill building Intent	Wider reading opportunities to include numeracy and SMSC	Final assessment task and title	SEND & PP Identify where access and learning is supported
Autumn 1	Textiles – Cushion cover	<p>To know and understand the properties of poly cotton.</p> <p>To understand the environmental impact of polyester.</p> <p>To understand how dye-sublimation printing works.</p> <p>Using tolerances within their practical work. (<i>Continued in KS4</i>).</p>		<p>Students will continue to use the sewing machines during this project, building on practical skills from last year.</p> <p>Students will use a dye-sublimation printer and heat press (under supervision) to print a design onto their fabric.</p> <p>Pattern cutting.</p> <p>Cutting fabric accurately using a pattern piece.</p>	<p>Quizzing sheet with information about the materials, environmental issues, key words, properties of fabrics and tools and equipment.</p> <p>Use of GCSE revision guides to help with some activities.</p> <p>Website link on the quizzing sheet for further reading.</p> <p>Learning how to sew a button onto fabric by hand. A valuable life skill.</p> <p>Group work encouraged and pupils working together to solve problems and help each other out.</p> <p>Discussions about possible careers such as pattern markers/cutters.</p>	Portfolio of work in the form of a sketchbook.	<p>Key words: polyester cotton Dye-sublimation Fabric shears Recycled Environmental Sustainability Publisher Abrasion Resistant</p> <p>Writing frames</p> <p>Quizzing sheets with the key topic information on.</p>

Autumn 2	Textiles – Cushion cover	To understand how to add decoration to fabric. To understand how to sew by hand.		Students will have access to the sewing machines to complete some machine embroidery. Sewing on a button by hand.	Use of subject-specific vocabulary through annotation and staff/peer feedback. Peer and self-assessment/target setting. Numeracy working to a specific size and measuring out to create a pattern piece. Appreciation of each other's work through peer assessment.	Practical work - cushion cover.	
Spring 1	Night Light	Understanding how to write a specification for a design project. Continued use of 2D design to create the housing for the light.		Using computers to present research and information. 2D design work continued.	Numeracy working to a specific size on 2D design using the grid on the tool bar to help measure accurately. Considering the needs of others when designing the product.	Portfolio of work in the form of a sketchbook. 2D design work evidenced in folders as the final design page.	Key words: Plywood Laser cutter Engrave Intricate Circuit Transistor Resistor Solder Design Aesthetics Writing frames Quizzing sheets with the key topic information on.
Spring 2	Night Light	Knowledge of printed circuit boards. Knowledge of components used to make a working circuit.		Using soldering irons to make the circuit for the LED to work. Using the laser cutter to cut out the box for the light to be housed in.	Use of subject-specific vocabulary through annotation and staff/peer feedback. Peer and self-assessment/target setting.	Practical work – Night light box and circuit board.	

		Understanding how to solder safely and correctly.					
Summer 1	Multicultural foods	<p>Knowledge of foods from around the world.</p> <p>Links to geography, pupils plot countries on a map and look at staple foods for each place.</p> <p>Knowledge of hygiene and safety when preparing, cooking and storing food.</p>		<p>Using different equipment in the food room to produce good quality outcomes.</p> <p>Weighing and measuring ingredients accurately.</p> <p>Understanding how to quantity of ingredients may affect the final outcome.</p>	<p>Thermometer used to highlight the different safety zones when preparing, cooking and storing food.</p> <p>Weighing and measuring ingredients.</p> <p>Thinking about preparing food for people in the community and the importance of safety.</p>	<p>Portfolio of work in the form of a sketchbook.</p> <p>Practical lessons: Spaghetti bolognaise Stir fry curry</p>	<p>Recipe sheets printed on specific coloured paper if needed.</p> <p>Writing frames.</p> <p>Key words on power points</p>
Summer 2	Multicultural foods	<p>Research project on China: Information about traditional Chinese food.</p> <p>What traditional cooking methods/equipment is used?</p> <p>Information about Chinese new year and celebration foods.</p> <p>Chinese foods used in medicine.</p> <p>Food labelling laws</p>		<p>Students will produce a project using computers about China. They will present their findings to the class.</p> <p>Students will look at different food packaging and study the legal requirements of the label requirements.</p>	<p>Key words.</p> <p>Nutritional information.</p> <p>Understanding other cultures and beliefs.</p> <p>Communication skills, sharing research with people.</p>	<p>Practical work.</p>	

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