

Long Term Plan: Design and Technology Year 8

Term	Unit title	Key knowledge/ Content to learn and retain	Essential skills to acquire (subject & generic)	Link to subject ethos and driver (rename)	Anticipated misconceptions	Links to previous KS	Links to future KS	Opportunity for stretch for high prior attainers	SMSC & British Values	Cultural Capital	Career Link
One	Making a Memory Box	<p>The design, make, evaluate cycle</p> <p>The use of CAD/CAM</p> <p>Properties of Softwoods and Hardwoods</p>	<p>Designing a product for an intended user</p> <p>Accurate measuring and cutting</p> <p>Tennon Saw Skills</p>		<p>The difference between CAD and CAM</p> <p>Students may confuse “hard” with “strong” and “ductile” with “malleable”</p>	<p>Students will have explored various common resistant materials as part of the upper KS2 programme of study, as well as simple electrical circuits.</p> <p>In Year 7, students practiced the design, make, evaluate cycle; as well as an introduction to material properties</p>	<p>As a fundamental introductory course, the key stage three programme of study lays the foundation for future study of either a Design and Technology or Engineering qualification at GCSE</p>	<p>Consider different materials that could be used for the casing of their speaker and justify the uses of the material chosen</p>	<p>Different products for different target clients, including potential users from all backgrounds and how this affects their needs</p>	<p>Exploration of different designers and materials that students may not have encountered before</p>	<p>As an introductory course, the KS3 technology programme of study lays the foundations for a wide range of STEM field careers.</p>
Two	Making a Speaker	<p>Properties of common materials</p>	<p>Interpret circuit diagrams</p> <p>Accurate and</p>		<p>The difference between a battery and a cell.</p>	<p>Students will have explored various common</p>	<p>As a fundamental introductory course, the</p>	<p>Explain the function of each component in</p>	<p>Different products for different target clients,</p>	<p>Exploration of different designers and materials that</p>	<p>As an introductory course, the KS3</p>

		Common electronic components	safe use of a soldering iron		The circuit diagrams of a number of components are similar and easy to confuse so will require explicit teaching and practice	resistant materials as part of the upper KS2 programme of study, as well as simple electrical circuits. In Year 7, students practiced the design, make, evaluate cycle; as well as an introduction to material properties	key stage three programme of study lays the foundation for future study of either a Design and Technology or Engineering qualification at GCSE	their speakers circuit; and suggest what impact it may have if one was not working correctly	including potential users from all backgrounds and how this affects their needs	students may not have encountered before	technology programme of study lays the foundations for a wide range of STEM field careers.
		Drawing circuit diagrams	Evaluating products against a given criteria								
		The use of solder and a soldering iron									
		The use of different components within a circuit									

As a rotation subject at KS3, Design and Technology is taught for 2 full terms, before students rotate into another technology subject.