

# KS3 Curriculum Map

## Design and Technology

Researching

Designing

Planning

Making

Evaluating

Year / Term	Unit of work	Core knowledge	Key concepts / skills
<p style="text-align: center;">Year 7 Autumn term 1+2 (7 Lessons)</p>	<p>Introduction to D&amp;T (One Lesson)</p>	<p>What is Design and Technology? How do I log on to:</p> <ul style="list-style-type: none"> <li>• My account</li> <li>• Show My Homework</li> <li>• 2d Design</li> <li>• Shared document area</li> </ul> <p>How do I make files and folders on my user area?</p>	
	<p>Drawing and Presentation Skills</p>	<p>Develop skills in different drawing disciplines</p> <ul style="list-style-type: none"> <li>• Single Point Perspective (Train)</li> <li>• Two Point Perspective (Radio)</li> <li>• Homework Perspective drawing</li> <li>• Rendering (Blocks)</li> <li>• 2d Design (Tutorial)</li> <li>• Orthographic Projection (3<sup>rd</sup> angle)</li> <li>• Isometric Projection</li> </ul> <p>Assessment – Drawing techniques</p>	<p style="text-align: center;">Designing Evaluating</p>

Year / Term	Unit of work	Core knowledge	Key concepts / skills
Year 7 Spring term 1+2 (6 Lessons)	Roller Ball toy	Design a wooden toy suitable for a target audience. <ul style="list-style-type: none"> <li>• Research including existing toys using ACCESS FM</li> <li>• Design Brief and Specification using ACCESS FM</li> <li>• Generating Design ideas in colour</li> <li>• 2d Design image for game base</li> </ul> Assessment – Research and Designing	<b>Research</b> <b>Designing</b>
		Planning and manufacturing wooden toy. <ul style="list-style-type: none"> <li>• Working drawing for toy sides (Orthographic)</li> <li>• Marking out and cutting wooden sides</li> <li>• Drilling holes in score zones</li> <li>• Homework Pillar Drill</li> </ul>	<b>Planning</b> <b>Making</b>

Year / Term	Unit of work	Core knowledge	Key concepts / skills
<p style="text-align: center;">Year 7 Summer term 1+2 (6 Lessons)</p>	Roller Ball toy	Assembly and finishing of a wooden toy <ul style="list-style-type: none"> <li>• Assembly of wooden toy (Sides)</li> <li>• Assembly of wooden toy (Acrylic top)</li> <li>• Finishing woods and plastics</li> <li>• <b>Homework Woods</b></li> </ul>	<p style="text-align: center;"><b>Planning</b> <b>Making</b></p>
		Evaluating products against a design brief and specification <ul style="list-style-type: none"> <li>• Use ACCESS FM to evaluate final toy design</li> </ul> <b>Assessment – Written evaluation</b>	<p style="text-align: center;"><b>Evaluating</b></p>
	Roller Ball Toy packaging	Design and manufacturing of toy packaging <ul style="list-style-type: none"> <li>• Research product packaging</li> <li>• Design suitable packaging for wooden toy</li> <li>• Manufacture of toy packaging</li> </ul>	<p style="text-align: center;"><b>Research</b> <b>Evaluating</b> <b>Designing</b> <b>Making</b></p>

Year / Term	Unit of work	Core knowledge	Key concepts / skills
Year 8 Autumn term 1+2 (7 Lessons)	Money Box	Design a wooden money box suitable for a target audience. <ul style="list-style-type: none"> <li>• Research including existing products using ACCESS FM</li> <li>• Write a Design Brief and Specification using ACCESS FM</li> <li>• Generating Design ideas in colour with rendering</li> <li>• 2d Design image for the money box background</li> </ul>	<p style="text-align: center;"> <b>Research</b>  <b>Designing</b> </p>
		Planning and manufacturing wooden money box. <ul style="list-style-type: none"> <li>• Working drawing for the money box sides (Orthographic)</li> <li>• Marking out and cutting wooden sides</li> <li>• <b>Homework Joining and finishing woods</b></li> <li>• Marking out and cutting finger joint slots using a mallet and chisel</li> </ul> <p style="color: green;">Assessment – Practical (Marking and Cutting)</p>	<p style="text-align: center;"> <b>Planning</b>  <b>Making</b> </p>

Year / Term	Unit of work	Core knowledge	Key concepts / skills
Year 8 Spring term 1+2 (6 Lessons)	Money Box	Assembly and finishing of a wooden money box. <ul style="list-style-type: none"> <li>• Assembly of wooden money box (Sides)</li> <li>• Assembly of wooden money box back base and top including money slot</li> <li>• Finishing woods and plastics</li> </ul>	<b>Planning</b>  <b>Making</b>
		Evaluating products against a design brief and specification. <ul style="list-style-type: none"> <li>• Use ACCESS FM to evaluate final money box against design specification and user needs</li> </ul> <b>Assessment – Written evaluation</b>	<b>Evaluating</b>

Year / Term	Unit of work	Core knowledge	Key concepts / skills
<p style="text-align: center;">Year 8 Summer term 1+2 (6 Lessons)</p>	<p>Characterised Letters Postcard</p>	<p>Research into typography, graphics and logo design.</p> <ul style="list-style-type: none"> <li>• Research in to logo design, branding and graphic typography</li> <li>• Design your own graphical typeface for a range of letters</li> <li>• <b>Homework Alphabet Design</b></li> <li>• Design ideas for a postcard using typography design</li> </ul> <p>Assessment – Researching Skills</p>	<p style="text-align: center;"><b>Research</b> <b>Designing</b></p>
		<p>Development of design ideas and CAD presentation.</p> <ul style="list-style-type: none"> <li>• 2d Design final idea for printing</li> <li>• Message, Address and Stamp position drawn</li> <li>• Lamination for protection</li> </ul>	<p style="text-align: center;"><b>Planning</b> <b>Making</b></p>
		<p>Evaluating postcard against typography research and design ideas.</p> <ul style="list-style-type: none"> <li>• Peer assessment through class discussion</li> <li>• Written evaluation on how designs developed though experimentation</li> </ul>	<p style="text-align: center;"><b>Evaluating</b></p>

Year / Term	Unit of work	Core knowledge	Key concepts / skills
Year 9 Autumn term 1+2 (7 Lessons)	Analogue Clock	To create clock designs for target for a chosen audience. <ul style="list-style-type: none"> <li>• Create design brief for a themed clock</li> <li>• Produce a specification for a new clock design</li> <li>• Use market research to develop designs</li> <li>• Materials research</li> <li>• Homework Types of Plastics</li> <li>• Developing ideas based on research.</li> </ul>	<b>Research</b> <b>Designing</b> <b>Evaluating</b>
		Produce prototype clock using CAM or traditional methods. <ul style="list-style-type: none"> <li>• Create CAD files for use in that laser cutter</li> <li>• Cut and finish materials for clock assembly</li> </ul> Assessment – Practical (Quality/Accuracy of the finished product)	<b>Evaluating</b> <b>Planning</b> <b>Making</b>



Year / Term	Unit of work	Core knowledge	Key concepts / skills
Year 9 Spring term 1+2 (6 Lessons)	Analogue Clock	Manufacturing a product <ul style="list-style-type: none"> <li>Assemble clock and perform quality checks</li> <li>Evaluate final product against design specification and brief</li> </ul> Assessment – Designing for a client	<b>Evaluating</b> <b>Making</b>
	Passive Amplifier	Developing an understanding of sound and Resonance. <ul style="list-style-type: none"> <li>Research in to powered and non-powered amplifiers</li> <li>Produce a design brief and specification</li> <li>Create initial design ideas for developing</li> </ul>	<b>Research</b> <b>Designing</b>

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<p style="text-align: center;">Year 9 Summer term 1+2 (6 Lessons)</p>	<p>Passive Amplifier</p>	<p>Development of designs ideas.</p> <ul style="list-style-type: none"> <li>• Develop final design in 3d</li> <li>• Orthographic drawing on 2d Design</li> <li>• Cutting list of materials</li> </ul>	<p><b>Planning</b></p>
		<p>Manufacturing the final design.</p> <ul style="list-style-type: none"> <li>• Marking out and cutting the joints</li> <li>• Assembly of the parts</li> <li>• Finishing of the product</li> </ul> <p>Assessment – Knowledge assessment paper 1</p>	<p><b>Making</b></p>
		<p>Evaluation of the final product</p> <ul style="list-style-type: none"> <li>• Testing and evaluation of the Passive Amplifier</li> <li>• Evaluation against the design brief and specification</li> <li>• Peer assessment to support improvements</li> <li>• Modification areas to better suit user requirements</li> </ul>	<p><b>Evaluating</b> <b>Designing</b></p>