



## KS2 Design and Technology Concept and Curriculum Map



Textiles	Cooking and Nutrition	Structures and Mechanisms
Textiles is creating designs and products for woven, knitted, stitched, printed or decorative work using fabric.	Designing, cooking and preparing dishes following the principles of a healthy and varied diet.	Creating designs and products, including free standing or framed structures and using levers, linkages and cams.
Ruby	Sapphire	Topaz
<p>Follow the design-make-evaluate structure to create a half-termly product:</p> <ul style="list-style-type: none"> <li>• Fairground attraction (<b>structures and mechanisms</b>)</li> <li>• Cushion covers – multisensory (<b>textiles</b>)</li> <li>• Food Technology – Savoury Dish (<b>cooking and nutrition</b>)</li> </ul> <p><b>Curriculum Content</b></p> <ul style="list-style-type: none"> <li>• Apply their understanding of how to strengthen, stiffen and reinforce more complex structures (using construction resources eg: knex)</li> <li>• Understand and use mechanical systems in their products (gears, pulleys, cams, leavers and linkages)</li> <li>• Understand and use electrical systems in their products</li> <li>• Understand and apply the principles of a healthy and varied diet</li> <li>• Prepare and cook savoury dishes using a range of cooking techniques</li> </ul>	<p>Follow the design-make-evaluate structure to create a half-termly product:</p> <ul style="list-style-type: none"> <li>• Light-Up Signs (<b>structures and mechanisms</b>)</li> <li>• Fabric standing flowers (<b>textiles</b>)</li> <li>• Food Technology – Savoury Dish (<b>cooking and nutrition</b>)</li> </ul> <p><b>Curriculum Content</b></p> <ul style="list-style-type: none"> <li>• Apply their understanding of how to strength, stiffen and reinforce more complex structures using a range of resources</li> <li>• Understand and use mechanical systems in their products (gears, pulleys, cams, leavers and linkages)</li> <li>• Understand and use electrical systems in their products</li> <li>• Understand and apply the principles of a healthy and varied diet</li> <li>• Prepare and cook savoury dishes using a range of cooking techniques</li> <li>• Understand seasonality</li> </ul>	<p>Follow the design-make-evaluate structure to create a half-termly product:</p> <ul style="list-style-type: none"> <li>• Musical Instrument (African inspired) (<b>structures and mechanisms</b>)</li> <li>• Moving Monsters (<b>textiles, structures and mechanisms</b>)</li> <li>• Food Technology – Savoury Dish (<b>cooking and nutrition</b>)</li> </ul> <p><b>Curriculum Content</b></p> <ul style="list-style-type: none"> <li>• Apply their understanding of how to strength, stiffen and reinforce more complex structures using a range of resources</li> <li>• Understand and use mechanical systems in their products (gears, pulleys, cams, leavers and linkages)</li> <li>• Understand and use electrical systems in their products</li> <li>• Apply their understanding of computing to program, monitor and control their products</li> <li>• Understand how key events and individuals in design and technology have helped shape the world</li> <li>• Understand and apply the principles of a healthy and varied diet</li> <li>• Prepare and cook savoury dishes using a range of cooking techniques</li> <li>• know where and how a variety of ingredients are grown, reared, caught and processed</li> </ul>
<p><b>Skill Progression Design</b></p> <ul style="list-style-type: none"> <li>• Use research and develop design criteria to inform the design of a product</li> <li>• Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer aided design.</li> </ul>	<p><b>Skill Progression Design</b></p> <ul style="list-style-type: none"> <li>• Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose</li> <li>• Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer aided design.</li> </ul>	<p><b>Skill Progression Design</b></p> <ul style="list-style-type: none"> <li>• Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose aimed at particular individuals or groups</li> <li>• Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer aided design.</li> </ul>

<p><b>Make</b></p> <ul style="list-style-type: none"> <li>• Select from and use a wider range of tools and equipment to preform practical tasks</li> <li>• range of materials and components including construction materials, textiles and ingredients</li> </ul> <p><b>Evaluate</b></p> <ul style="list-style-type: none"> <li>• Investigate and analyse a range of existing products</li> <li>• Evaluate their ideas and products against their own design criteria</li> </ul>	<p><b>Make</b></p> <ul style="list-style-type: none"> <li>• Select from and use a wider range of tools and equipment to preform practical tasks</li> <li>• range of materials and components including construction materials, textiles and ingredients according to their functional properties and aesthetic qualities</li> </ul> <p><b>Evaluate</b></p> <ul style="list-style-type: none"> <li>• Investigate and analyse a range of existing products</li> <li>• Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work</li> </ul>	<p><b>Make</b></p> <ul style="list-style-type: none"> <li>• Select from and use a wider range of tools and equipment to preform practical tasks</li> <li>• Select from and use a wider range of materials and components including construction materials, textiles and ingredients according to their functional properties and aesthetic qualities</li> </ul> <p><b>Evaluate</b></p> <ul style="list-style-type: none"> <li>• Investigate and analyse a range of existing products</li> <li>• Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work</li> </ul>
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