

Year 1

| Design, make, evaluate and improve | Historical inspiration | Food | Textiles | Construction |
|--|--|---|---|---|
| <p>Design products that have a definite function for a particular person</p> <p>Make products to meet basic design brief</p> | <p>Investigate historic designs to find their strengths and weaknesses</p> | <p>Select from and use ingredients according to their characteristics</p> | <p>Use a running stitch to join fabric</p> <p>Use methods such as dyeing, adding sequins or printing alter the appearance of fabric</p> <p>Make use of template to produce shapes</p> | <p>practice techniques to join and/or strengthen materials eg , gluing and reinforcing card</p> |

Year 2

| Design, make evaluate improve | Historical Inspiration | Food | Mechanics | Materials |
|---|--|--|--|--|
| <p>Design and make products, modifying the product as the project evolves</p> | <p>Take an existing design and propose improvements</p> <p>Explore the processes used to create products</p> | <p>Safely cut, peel or grate ingredients in a hygienic manner</p> <p>Use measuring cups or electronic scales to measure the required amounts</p> <p>Combine ingredients to produce food.</p> | <p>explore and use mechanisms in their products , wheels and axles</p> | <p>Demonstrate safe use of a given tool</p> <p>Perform a range of cutting and shaping techniques eg tearing, cutting, folding and curling</p> <p>Use a range of joining techniques eg gluing, hinges or combining materials to strengthen.</p> |

Year 3

| Design, make, evaluate and improve | Historical inspiration | Food | Textiles | Construction |
|---|--|---|--|---|
| Produce designs with a clear purpose having explored needs Select materials carefully to suit the design and use | Know the work of some recognised designers in all areas of study | Use correct utensils to hygienically prepare food Combine and cook | Use correct stitch to join materials Add decorative finish using a suitable technique | Select appropriate techniques to construct products |

Year 4

| Design, make, evaluate and improve | Historical Inspiration | Electricals and Electronics | Mechanics | Materials |
|---|---|--|--|---|
| Refine methods and design as work progresses, constantly reassessing design Use computer packages to design and model products | Make improvements to established designs and be able to explain why Disassemble designs to discover how they work. | Construct series and parallel circuits | Apply understanding of forces to select a suitable mechanism eg levers, winding mechanism, pulleys and gears | Use suitable cutting and shaping techniques Choose suitable joining techniques |

Year 5

| Design, make evaluate and improve | Historical Inspiration | Electricals and Electronics | Textiles | Construction |
|--|---|--|--|---|
| <p>Design by considering the user, prioritising good function before profit</p> <p>Produce several prototypes each building upon the previous to optimise design</p> | <p>Combine designs from several significant designers explaining the selections</p> | <p>Create circuits using electronics kits that combine a number of parts</p> | <p>Use a variety of stitching techniques to join fabrics</p> <p>Understand the purpose of and include a seam allowance</p> | <p>Practice practical skills to a reasonable standard to produce products</p> |

Year 6

| Design, make evaluate and improve | Historical Inspiration | Food | Mechanics | Materials |
|---|---|---|---|--|
| <p>Produce a good quality finish to products using art techniques</p> <p>Include designing processes such as prototypes, cross-sectional diagrams and CAD</p> | <p>Start with existing designs and invent improved ones</p> <p>Evaluate the design of products and identify possible further changes to improve its performance</p> | <p>Understand how to store and handle food ingredients properly</p> <p>Invent and modify own recipes including ingredients, methods, cooking times and temperatures</p> | <p>Combine electronics and mechanics to produce original designs</p> <p>Use cams to change a rotation into a push/pull movement</p> | <p>Cut with precision and produce a good finish</p> <p>Select appropriate tools to cut and shape a particular type of material</p> |