

## Design and Technology

| YEAR 1   |   |   |
|--|---|---|
| Knowledge  | Skills  | Attitude  |
| <p><b><u>Evaluate</u></b><br/>Talk about their ideas<br/>Express likes and dislikes</p>  | <p><b><u>Design</u></b></p> <ul style="list-style-type: none"> <li>• To tell someone what they are going to do</li> <li>• To use pictures and words to describe what they want to do</li> <li>• To draw pictures with labels to tell others about their designs</li> <li>• Can use the computer to plan their ideas using age appropriate software</li> </ul>   | <ul style="list-style-type: none"> <li>• The pupil demonstrates the ability to <u>communicate</u> with others.</li> <li>• The pupil demonstrates the ability to <u>work with other</u> children (<u>collaborate</u>).</li> <li>• The pupil shows <u>enthusiasm</u> and <u>commitment</u> to the topic.</li> </ul> |
| <p><b><u>Technical Knowledge</u></b></p> <ul style="list-style-type: none"> <li>• I can talk about how moving objects work</li> <li>• I can talk about my work, telling others why I did it the way I did</li> </ul> | <p><b><u>Make</u></b></p> <ul style="list-style-type: none"> <li>• To begin to use scissors safely to cut paper and thin card</li> <li>• To use construction kits to try out ideas</li> <li>• To begin to shape, assemble and join and combine materials in a variety of ways</li> <li>• To begin simple levers and sliding mechanisms to create movement</li> <li>• To make a model and talk about how it is useful for someone</li> </ul> |   |
|  | <p><b><u>Cooking and Nutrition</u></b></p> <ul style="list-style-type: none"> <li>• Know different grips needed for cutting, stirring etc...</li> <li>• Learn the importance of hygiene when handling food- washing hands, hair tied back, wearing an apron</li> </ul>  |   |

**YEAR 2**

| Knowledge   | Skills  | Attitude   |
|---|---|--|
| <p><b><u>Evaluate</u></b></p> <ul style="list-style-type: none"> <li>• I write about who my products are for and explain why they will be useful, giving clear examples</li> <li>• I discuss the improvements needed for my work</li> </ul>   | <p><b><u>Design</u></b></p> <ul style="list-style-type: none"> <li>• To write about my work using diagrams and labels</li> <li>• To write about who my products are for and explain why they will be useful, giving clear examples</li> <li>• Beginning to understand how wheels and axles work</li> </ul>  | <ul style="list-style-type: none"> <li>• The pupil demonstrates the ability to <u>communicate</u> with others.</li> <li>• The pupil demonstrates the ability to <u>work with other children (collaborate)</u>.</li> <li>• The pupil shows <u>enthusiasm</u> and <u>commitment</u> to the topic.</li> </ul> |
| <p><b><u>Technical Knowledge</u></b></p> <ul style="list-style-type: none"> <li>• I describe the characteristics of the materials I have chosen<br/>I recount the design and make process with lively detail</li> <li>• Can recognise the necessity of following an order in a recipe</li> <li>• Beginning to learn about a healthy diet</li> </ul> | <p><b><u>Make</u></b></p> <ul style="list-style-type: none"> <li>• Can use PVA, sticky tape, masking tape etc...to join materials</li> <li>• Use scissors to cut straight lines, corners and curves</li> <li>• Can use reclaimed materials and construction materials</li> <li>• Can join 2D and 3D materials effectively in different ways</li> <li>• Can take digital photographs of my products and combine them with text to describe and evaluate my products.</li> <li>• Can put together a set of digital photographs of my work into a slideshow with captions</li> <li>• Beginning to use basic sewing techniques</li> </ul> |  |
|   | <p><b><u>Cooking and Nutrition</u></b></p> <ul style="list-style-type: none"> <li>• Can use scales with help</li> <li>• Can measure liquids with help</li> </ul>  |  |

**YEAR 3**

| Knowledge   | Skills   | Attitude  |
|---|--|---|
| <p><b><u>Evaluate</u></b></p> <ul style="list-style-type: none"> <li>• Can describe how my product will be of use to the user</li> <li>• Present my designs and ideas, using ICT</li> <li>• Beginning to learn how to start and finish</li> </ul> | <p><b><u>Design</u></b></p> <ul style="list-style-type: none"> <li>• Create adverts for my products, focusing on quality, design and benefits</li> <li>• Can generate ideas and plans, considering users and purposes</li> <li>• Can use labelled sketches to communicate the details of their designing</li> <li>• Create animated slide shows to ‘advertise’ the benefits of my products or design ideas</li> <li>• Research products and designs by using the Internet</li> </ul> | <ul style="list-style-type: none"> <li>• The pupil demonstrates the ability to <u>communicate</u> with others.</li> <li>• The pupil demonstrates the ability to <u>work with other</u> children (<u>collaborate</u>).</li> <li>• The pupil shows <u>enthusiasm</u> and <u>commitment</u> to the topic.</li> </ul> |
| <p><b><u>Technical Knowledge</u></b></p> <ul style="list-style-type: none"> <li>• Clarify ideas when asked</li> <li>• Know about healthy diet</li> <li>• Follow an order in a recipe</li> </ul>   | <p><b><u>Make</u></b></p> <ul style="list-style-type: none"> <li>• Beginning to understand winding and turning mechanisms</li> <li>• Use pencils and rulers to mark out</li> <li>• Beginning to measure, mark and cut out using cms</li> <li>• Use a vice to secure material for cutting</li> <li>• Beginning to produce and control movement</li> <li>• Knot tying skills</li> </ul>  |   |
|   | <p><b><u>Cooking and Nutrition</u></b></p> <ul style="list-style-type: none"> <li>• Can use scales confidently</li> <li>• Can measure liquids confidently</li> <li>• Use correct knife grips for cutting and spreading</li> </ul>  |   |

- Beginning to hold food steady with a fork whilst chopping, slicing

**YEAR 4**

| Knowledge   | Skills  | Attitude  |
|---|---|---|
| <p><b><u>Evaluate</u></b></p> <ul style="list-style-type: none"> <li>• Communicate my ideas, and also alternative ideas which show that I am aware of the constraints on my ideas</li> <li>• I can summarise the views of intended users</li> </ul> | <p><b><u>Design</u></b></p> <ul style="list-style-type: none"> <li>• Use text, labelled diagrams and annotations to describe my ideas.</li> <li>• Research products and users by using the internet</li> <li>• Can generate ideas by gathering and using information</li> <li>• Can produce step by step plans</li> </ul>   | <ul style="list-style-type: none"> <li>• The pupil demonstrates the ability to <u>communicate</u> with others.</li> <li>• The pupil demonstrates the ability to <u>work with other</u> children (<u>collaborate</u>).</li> <li>• The pupil shows <u>enthusiasm</u> and <u>commitment</u> to the topic.</li> </ul> |
| <p><b><u>Technical Knowledge</u></b></p> <ul style="list-style-type: none"> <li>• Present a persuasive text on the benefits of my product</li> <li>• Can use an ICT control program to make a mechanism work</li> </ul>                             | <p><b><u>Make</u></b></p> <ul style="list-style-type: none"> <li>• Create multimedia presentations to demonstrate my designs or products</li> <li>• Use spreadsheets to produce schedules of work</li> <li>• Can use an ICT control program to make a mechanism work</li> <li>• Beginning to assemble pneumatic systems</li> <li>• Can use a hand drill with supervision</li> </ul> |   |
|   | <p><b><u>Cooking and Nutrition</u></b></p> <ul style="list-style-type: none"> <li>• Can use scales to measure more accurately</li> <li>• Can combine ingredients into a product</li> </ul>  |   |

**YEAR 5**

| Knowledge   | Skills  | Attitude  |
|---|---|---|
| <p><b><u>Evaluate</u></b></p> <ul style="list-style-type: none"> <li>• Use a range of ways of seeking the views of intended users of my products (market research)</li> <li>• Check my work as it develops and modify my approach in light of progress</li> </ul>   | <p><b><u>Design</u></b></p> <ul style="list-style-type: none"> <li>• Can generate ideas by gathering and using information</li> <li>• Can produce step by step plans</li> <li>• Can use labelled sketches to communicate the details of their designs</li> <li>• Make detailed plans, using ICT to assist</li> </ul>  | <ul style="list-style-type: none"> <li>• The pupil demonstrates the ability to <u>communicate</u> with others.</li> <li>• The pupil demonstrates the ability to <u>work with other</u> children (<u>collaborate</u>).</li> <li>• The pupil shows <u>enthusiasm</u> and <u>commitment</u> to the topic.</li> </ul> |
| <p><b><u>Technical Knowledge</u></b></p> <ul style="list-style-type: none"> <li>• Communicate a range of different designs, aware of the limits of some ideas</li> <li>• Can apply knowledge of electrical circuits and use switches to make e.g an alarm box/torch</li> <li>• Understand healthy eating</li> </ul> | <p><b><u>Make</u></b></p> <ul style="list-style-type: none"> <li>• Control devices using ICT with accuracy</li> <li>• Can use levers and sliding mechanisms to create movement</li> <li>• Can use a pencil and a ruler to mark for cutting</li> <li>• Use pins to secure fasteners</li> <li>• Beginning to use basic sewing techniques</li> <li>• Use tools independently</li> <li>• Tool talk bow, saw</li> <li>• Identifying wood for a purpose</li> <li>• Can use scales to measure more accurately</li> <li>• Can combine ingredients into a product</li> </ul> |   |
|   | <p><b><u>Cooking and Nutrition</u></b></p> <ul style="list-style-type: none"> <li>• Can use scales to measure more accurately</li> <li>• Can combine ingredients into a product</li> <li>• Can follow a simple recipe</li> </ul>  |   |

**YEAR 6**

| Knowledge  | Skills  | Attitude  |
|--|---|---|
| <p><b><u>Evaluate</u></b></p> <ul style="list-style-type: none"> <li>• Use my understanding of the characteristics of familiar products when developing and communicating my ideas</li> <li>• Check my work as it develops and modify my approach in light of progress</li> <li>• Test and evaluate my products, with the intended use in mind.</li> </ul> | <p><b><u>Design</u></b></p> <ul style="list-style-type: none"> <li>• Can generate ideas by gathering and using information</li> <li>• Can produce step by step plans</li> <li>• Can use labelled sketches to communicate the details of their designs</li> <li>• Can take users views into account when designing</li> <li>• Make detailed plans, using ICT to assist</li> <li>•</li> </ul> | <ul style="list-style-type: none"> <li>• The pupil demonstrates the ability to <u>communicate</u> with others.</li> <li>• The pupil demonstrates the ability to <u>work with other</u> children (<u>collaborate</u>).</li> <li>• The pupil shows <u>enthusiasm</u> and <u>commitment</u> to the topic.</li> </ul> |
| <p><b><u>Technical Knowledge</u></b></p> <ul style="list-style-type: none"> <li>• Use the Internet to thoroughly research products and the environments in which they are used</li> </ul>  | <p><b><u>Make</u></b></p> <ul style="list-style-type: none"> <li>• Use sand paper to smooth edges</li> <li>• Can saw under supervision</li> <li>• Can join wood together</li> <li>• Use a screwdriver to connect wires in a circuit</li> <li>• Find a fault in a simple circuit and correct it</li> <li>• Knot tying</li> </ul>   |   |
|  | <p><b><u>Cooking and Nutrition</u></b></p> <ul style="list-style-type: none"> <li>• Can use scales to measure more accurately</li> <li>• Can combine ingredients into a product</li> <li>• Can follow a simple recipe</li> <li>• Know that portions of ingredients will affect the product</li> </ul>   |   |