

## Design and Technology – Skills to be met

| Skill                                                                                                           | <u>Year 1</u>                                                                                                                                                      | <u>Year 2</u>                                                                                                                                                                                                                                                       | <u>Year 3</u>                                                                                                                                                                                                                                                                                 | <u>Year 4</u>                                                                                                                                                                                                                                                                                 | <u>Year 5</u>                                                                                                                                                                                                                                                                                                                                                                                             | <u>Year 6</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
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| <p><b><u>Background Research – Lesson 1</u></b></p> <p>Exploring context and existing products</p>              | <p>Understand what a product is and who it is for</p> <p>Understand how a product works and how it is used</p> <p>Identify where you might find this product</p>   | <p>Understand what a product is and who it is for</p> <p>Understand how a product works and how it is used</p> <p>Identify where you might find this product</p> <p>Identify the materials used to make the product</p> <p>Express an opinion about the product</p> | <p>Identify who made the product, when it was made and what its purpose is</p> <p>Identify what the product has been made from</p> <p>Evaluate the product on design and use</p> <p><b>Brain Builders:</b> Research facts about famous inventors/ chefs / designers etc linked to product</p> | <p>Identify who made the product, when it was made and what its purpose is</p> <p>Identify what the product has been made from</p> <p>Evaluate the product on design and use</p> <p><b>Brain Builders:</b> Research facts about famous inventors/ chefs / designers etc linked to product</p> | <p>Identify who made the product, when it was made and what its purpose is</p> <p>Identify what the product has been made from and how environmentally friendly the materials are</p> <p>Evaluate the product on design, appearance and use</p> <p>Identify the cost to make the product</p> <p><b>Brain Builders:</b> Research facts about famous inventors/ chefs / designers etc linked to product</p> | <p>Identify who made the product, when it was made and what its purpose is</p> <p>Identify what the product has been made from and how environmentally friendly the materials are</p> <p>Evaluate the product on design, appearance and use</p> <p>Identify the cost to make the product and whether it has any other purposes eg. Leading innovation of the time, trend setting</p> <p><b>Brain Builders:</b> Research facts about famous inventors/ chefs / designers etc linked to product</p> |
| <p><b><u>Design Criteria – Lesson 2</u></b></p> <p>Understanding their intended users and their own product</p> | <p>Explain what product they will be designing and making</p> <p>Explain who their product will be used by</p> <p>Describe what their product will be used for</p> | <p>Use own experiences and existing products to develop ideas</p> <p>Explain what product they will be designing and making</p> <p>Explain who their product will be used by</p> <p>Describe what their</p>                                                         | <p><b>Brain Builders:</b> Understand and gather information about what a particular group or people want from a product</p> <p>Describe the purpose of their product and how it will work</p> <p>Identify design features that will appeal to</p>                                             | <p><b>Brain Builders:</b> Understand and gather information about what a particular group or people want from a product</p> <p>Describe the purpose of their product</p> <p>Identify design features that will appeal to intended users</p>                                                   | <p><b>Brain Builders:</b> Understand and gather information about what a particular group or people want from a product, using questionnaires, surveys etc</p> <p>Describe the purpose of their product</p> <p>Identify design features that will appeal to</p>                                                                                                                                           | <p><b>Brain Builders:</b> Understand and gather information about what a particular group or people want from a product, using questionnaires, surveys etc</p> <p>Describe the purpose of their product</p> <p>Identify design features that will appeal to</p>                                                                                                                                                                                                                                   |

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|                                                                                                         |                                                                                                        | <p>product will be used for and how it will work</p> <p>Explain why their product is suitable for the intended user</p>                                                                                                                                                                                     | <p>intended users<br/>Explain how parts of their product works</p> <p>Generate realistic ideas that meet needs of user</p>                                                                                                                                                                                            | <p>Explain how parts of their product works</p> <p>Develop their own design criteria and use for planning ideas</p> <p>Generate realistic ideas that meet needs of user and take into account availability of resources</p>                                                                                           | <p>intended users<br/>Explain how parts of their product will work</p> <p>Develop their own design criteria and use for planning ideas</p> <p>Generate innovative ideas that meet needs of user and take into account availability of resources</p>                                                                                                                                                                                | <p>intended users<br/>Explain how parts of their product will work</p> <p>Create a design description for their product</p> <p>Highlight the impact of time, resources and cost within their design ideas</p> <p>Generate innovative ideas that meet needs of user</p>                                                                                                                                                             |
| <p><b><u>Planning – Lesson 3</u></b></p> <p>Communicating ideas and creating prototypes for product</p> | <p>Discuss what their steps for making could be</p> <p>Represent ideas through talking and drawing</p> | <p>Discuss what their steps for making could be</p> <p>Represent ideas through talking, drawing and <b>computing</b> – (where appropriate)</p> <p>Choose materials to use based on suitability of their properties</p> <p>Create templates/pattern pieces and explore materials whilst developing ideas</p> | <p>Share and discuss ideas with others</p> <p>Order the main stages of making</p> <p>Choose materials to use based on suitability of their properties</p> <p>Represent ideas in diagrams, annotated sketches and <b>computer based programmes</b> (where appropriate)</p> <p>Create pattern pieces and prototypes</p> | <p>Share and discuss ideas with others</p> <p>Order the main stages of making</p> <p>Choose materials to use based on suitability of their properties</p> <p>Represent ideas in diagrams, annotated sketches and <b>computer based programmes</b> (where appropriate)</p> <p>Create pattern pieces and prototypes</p> | <p>Share and discuss ideas with others</p> <p>Record a step by step plan for making</p> <p>Produce lists for the tools, equipment and materials they will be using</p> <p>Choose materials to use based on suitability of their properties and aesthetic qualities</p> <p>Represent ideas in diagrams, annotated sketches and <b>computer based programmes</b> (where appropriate)</p> <p>Create pattern pieces and prototypes</p> | <p>Share and discuss ideas with others</p> <p>Record a step by step plan for making</p> <p>Produce lists for the tools, equipment and materials they will be using</p> <p>Choose materials to use based on suitability of their properties and aesthetic qualities</p> <p>Represent ideas in diagrams, annotated sketches and <b>computer based programmes</b> (where appropriate)</p> <p>Create pattern pieces and prototypes</p> |
|                                                                                                         | <b><u>Across KS1:</u></b> Use materials -                                                              | <b><u>Across KS1:</u></b> Use materials -                                                                                                                                                                                                                                                                   | <b><u>Across KS2:</u></b> Use materials -                                                                                                                                                                                                                                                                             | <b><u>Across KS2:</u></b> Use materials -                                                                                                                                                                                                                                                                             | <b><u>Across KS2:</u></b> Use materials -                                                                                                                                                                                                                                                                                                                                                                                          | <b><u>Across KS2:</u></b> Use materials -                                                                                                                                                                                                                                                                                                                                                                                          |

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| <p><b><u>Making – Lesson 4-5</u></b></p> <p>Selecting the tools and applying the practical skills and techniques</p>  | <p><i>construction materials and kits, textiles, food and mechanical components</i></p> <p>Choose suitable tools for making</p> <p>Follow safety and food hygiene procedures</p> <p>Measure, mark, cut and shape materials and components</p> <p>Join, assemble and combine materials and components</p> | <p><i>construction materials and kits, textiles, food and mechanical components</i></p> <p>Choose suitable tools for making whilst explaining why they should be used</p> <p>Follow safety and food hygiene procedures</p> <p>Measure, mark, cut and shape materials and components</p> <p>Join, assemble and combine materials and components</p> <p>Use finishing techniques, including skills learnt in Art</p> | <p><i>construction materials and kits, textiles, food, mechanical and electrical components</i></p> <p>Choose suitable tools for making whilst explaining why they should be used</p> <p>Use design criteria whilst making</p> <p>Follow safety and food hygiene procedures</p> <p>Measure, mark, cut and shape materials and components with some accuracy</p> <p>Join, assemble and combine materials and components with some accuracy</p> <p>Use finishing techniques, including skills learnt in Art with some accuracy</p> | <p><i>construction materials and kits, textiles, food, mechanical and electrical components</i></p> <p>Choose suitable tools for making whilst explaining why they should be used</p> <p>Use design criteria whilst making</p> <p>Follow safety and food hygiene procedures</p> <p>Measure, mark, cut and shape materials and components with some accuracy</p> <p>Join, assemble and combine materials and components with some accuracy</p> <p>Use finishing techniques, including skills learnt in Art with some accuracy</p> | <p><i>construction materials and kits, textiles, food, mechanical and electrical components</i></p> <p>Choose suitable tools for making whilst explaining why they should be used</p> <p>Use design criteria whilst making</p> <p>Follow safety and food hygiene procedures</p> <p>Measure, mark, cut and shape materials and components accurately</p> <p>Join, assemble and combine materials and components accurately</p> <p>Demonstrate problem solving skills when encountering a mistake or practical problem</p> <p>Use finishing techniques, including skills learnt in Art accurately</p> | <p><i>construction materials and kits, textiles, food, mechanical and electrical components</i></p> <p>Choose suitable tools for making whilst explaining why they should be used</p> <p>Use design criteria whilst making</p> <p>Follow safety and food hygiene procedures</p> <p>Measure, mark, cut and shape materials and components accurately</p> <p>Join, assemble and combine materials and components accurately</p> <p>Demonstrate problem solving skills when encountering a mistake or practical problem</p> <p>Use finishing techniques that involve a number of steps, including skills learnt in Art accurately</p> |
| <p><b><u>Evaluation – Lesson 6</u></b></p> <p>Referring to planning and initial ideas in evaluating their product</p> | <p>Talk about their design ideas and what they have made</p> <p>Make simple judgements of how the product met their design ideas</p>                                                                                                                                                                     | <p>Talk about their design ideas and what they have made</p> <p>Make simple judgements of how the product met their design ideas</p> <p>Suggest how their product could be improved</p>                                                                                                                                                                                                                            | <p>Use design criteria to evaluate product – identifying both strengths and areas for development</p> <p>Consider the views of others, including intended user, whilst evaluating product</p>                                                                                                                                                                                                                                                                                                                                    | <p>Use design criteria to evaluate product – identifying both strengths and areas for development</p> <p>Consider the views of others, including intended user, whilst evaluating product</p>                                                                                                                                                                                                                                                                                                                                    | <p>Use design criteria to evaluate product – identifying both strengths and areas for development</p> <p>Consider the views of others, including intended user, whilst evaluating product</p>                                                                                                                                                                                                                                                                                                                                                                                                       | <p>Use design criteria to evaluate product – looking at quality of end product and design and whether it is fit for its intended purpose</p> <p>Consider the views of others, including intended user, whilst evaluating product</p>                                                                                                                                                                                                                                                                                                                                                                                               |

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| <p><b><u>Teaching cooking and nutrition</u></b></p> <p>Understanding food and food preparation</p> | <p><b><u>Across KS1:</u></b></p> <p>Understand that food comes from plants or animals</p> <p>Understand that food has to be farmed, caught, or grown</p>                                                                                                                                                                             |  | <p><b><u>Lower KS2:</u></b></p> <p>Understand which foods are reared, caught, or grown and that this happens in the UK and across the globe</p> <p>Understand that recipes can be changed by adding or taking away ingredients</p> <p>Understand that the seasons can affect food produce</p>                                                                        |  | <p><b><u>Upper KS2:</u></b></p> <p>Understand which foods are reared, caught, or grown and that this happens in the UK and across the globe</p> <p>Understand that the seasons can affect food produce</p> <p>Understand that sometimes raw ingredients need to be processed before they can be used in cooking (eg. De-feathering a chicken)</p> <p>Understand that recipes can be adapted to change the appearance, taste and aroma of a dish</p> |  |
| <p><b><u>Teaching cooking and nutrition</u></b></p> <p>Food preparation, cooking and nutrition</p> | <p><b><u>Across KS1:</u></b></p> <p>Sort foods into the 5 groups using The Eatwell Plate</p> <p>Identify that people should eat at least 5 portions of fruit and vegetables a day</p> <p>Prepare simple dishes hygienically and safely without a heat source</p> <p>Use cooking techniques such as: cutting, peeling and grating</p> |  | <p><b><u>Lower KS2:</u></b></p> <p>Sort foods into the 5 groups using The Eatwell Plate and identify that this makes up a healthy diet</p> <p>Identify that food and drink are needed to provide energy for a healthy and active lifestyle</p> <p>Identify that people should eat at least 5 portions of fruit and vegetables a day</p> <p>Prepare simple dishes</p> |  | <p><b><u>Upper KS2:</u></b></p> <p>Sort foods into the 5 groups using The Eatwell Plate and identify that this makes up a healthy diet</p> <p>Identify that food and drink provide certain nutritional and health benefits which support a healthy lifestyle</p> <p>Identify that people should eat at least 5 portions of fruit and vegetables a day</p>                                                                                           |  |

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|  |  |  | <p>hygienically and safely,<br/>where needed with a heat<br/>source</p> <p>Use cooking techniques<br/>such as: chopping, peeling,<br/>grating slicing, mixing,<br/>spreading, kneading and<br/>baking</p> |  | <p>Prepare simple dishes<br/>hygienically and safely,<br/>where needed with a heat<br/>source</p> <p>Use cooking techniques<br/>such as: chopping, peeling,<br/>grating slicing, mixing,<br/>spreading, kneading and<br/>baking</p> |  |
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