Progression Skills in Design Technology

| Designing | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
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| **Understanding contexts, users and purposes** | Understand what a product is and who it is for.<br><br>Understand how a product works and how it is used.<br><br>Identify where you might find this product. | Understand what a product is and who it is for.<br><br>Understand how a product works and how it is used.<br><br>Identify where you might find this product.<br><br>Identify the materials used to make the product.<br><br>Express an opinion about the product. | Identify who made the product, when it was made and what its purpose is.<br><br>Identify what the product has been made from.<br><br>Evaluate the product on design and use.<br><br>Research inventors, designers, engineers, chefs and manufacturers who have developed ground breaking products. | Identify who made the product, when it was made and what its purpose is.<br><br>Identify what the product has been made from.<br><br>Evaluate the product on design and use.<br><br>Research inventors, designers, engineers, chefs and manufacturers who have developed ground breaking products. | Identify who made the product, when it was made and what its purpose is.<br><br>Identify what the product has been made from and how environmentally friendly the materials are.<br><br>Identify the cost to make the product.<br><br>Research inventors, designers, engineers, chefs and manufacturers who have developed ground breaking products. | Identify who made the product, when it was made and what its purpose is.<br><br>Identify what the product has been made from and how environmentally friendly the materials are.<br><br>Evaluate the product on design, appearance and use<br><br>Identify the cost to make the product and whether it has any other purposes.<br><br>Research inventors, designers, engineers, chefs and manufacturers who have developed ground breaking products. |

| Designing | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
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| **Generating, developing, modelling and communicating ideas.** | Explain what product they will be designing and making.<br><br>Explain who their product will be used by.<br><br>Describe what their product will be used for.<br><br>Begin to communicate their ideas through talk and drawings. | Use own experiences and existing products to develop ideas.<br><br>Explain what product they will be designing and making.<br><br>Explain who their product will be used by.<br><br>Describe what their product will be used for.<br><br>Develop and communicate ideas by talking and drawing.<br><br>Model ideas by exploring materials, components and construction kits and by making templates and mock-ups.<br><br>Use information and communication technology where appropriate, to develop and communicate their ideas. | Understand and gather information about what a particular group or people want from a product.<br><br>Describe the purpose of their product and how it will work.<br><br>Identify design features that will appeal to intended users.<br><br>Explain how parts of their product work.<br><br>Generate realistic ideas that meet needs of user. | Understand and gather information about what a particular group or people want from a product.<br><br>Describe the purpose of their product and how it will work.<br><br>Identify design features that will appeal to intended users.<br><br>Explain how parts of their product work.<br><br>Develop their own design criteria and use for planning ideas.<br><br>Generate realistic ideas that meet needs of user. | Understand and gather information about what a particular group or people want from a product.<br><br>Describe the purpose of their product and how it will work.<br><br>Identify design features that will appeal to intended users.<br><br>Explain how parts of their product work.<br><br>Develop their own design criteria and use for planning ideas.<br><br>Generate innovative ideas that meet needs of user and take into account availability of resources. | Understand and gather information about what a particular group or people want from a product.<br><br>Describe the purpose of their product and how it will work.<br><br>Identify design features that will appeal to intended users.<br><br>Explain how parts of their product work.<br><br>Create a design description for their product.<br><br>Highlight the impact of time, resources and cost within their design ideas.<br><br>Generate innovative ideas that meet needs of user. |

| Making | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
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| **Planning**<br><br>**Practical skills and techniques** | Select from a range of tools and equipment<br><br>Follow safety and hygiene procedures.<br><br>Measure, mark, cut and shape materials and components.<br><br>Join, assemble and combine materials and components. | Choose suitable tools for making and explain why they should be used.<br><br>Follow safety and hygiene procedures.<br><br>Measure, mark, cut and shape materials and components.<br><br>Join, assemble and combine materials and components.<br><br>Use finishing techniques including skills learnt in art. | Choose suitable tools for making.<br><br>Explain their choice of materials and components according to functional properties and aesthetic qualities.<br><br>Use design criteria whilst making.<br><br>Follow safety and hygiene procedures.<br><br>Measure, mark, cut and shape materials and components with some accuracy.<br><br>Join, assemble and combine materials with some accuracy.<br><br>Use finishing techniques including skills learnt in art with some accuracy. | Choose suitable tools for making.<br><br>Explain their choice of materials and components according to functional properties and aesthetic qualities.<br><br>Use design criteria whilst making.<br><br>Follow safety and hygiene procedures.<br><br>Measure, mark, cut and shape materials and components with some accuracy.<br><br>Join, assemble and combine materials with some accuracy.<br><br>Use finishing techniques including skills learnt in art with some accuracy. | Choose suitable tools for making.<br><br>Explain their choice of materials and components according to functional properties and aesthetic qualities.<br><br>Use design criteria whilst making.<br><br>Follow safety and hygiene procedures.<br><br>Measure, mark, cut and shape materials and components with some accurately.<br><br>Join, assemble and combine materials with some accurately.<br><br>Demonstrate problem solving skills when encountering a mistake or practical problem.<br><br>Use finishing techniques including skills learnt in art with some accurately. | Choose suitable tools for making.<br><br>Explain their choice of materials and components according to functional properties and aesthetic qualities.<br><br>Use design criteria whilst making.<br><br>Follow safety and hygiene procedures.<br><br>Measure, mark, cut and shape materials and components with some accurately.<br><br>Join, assemble and combine materials with some accurately.<br><br>Demonstrate problem solving skills when encountering a mistake or practical problem.<br><br>Use finishing techniques that involve a number of steps, including skills learnt in art with some accurately. |

| Evaluating | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
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| **Own ideas and products** | Talk about their design ideas and what they have made<br><br>Make simple judgements about their products and ideas against design criteria | Talk about their design ideas and what they have made<br><br>Make simple judgements of how the product met their design ideas.<br><br>Suggest how their product could be improved. | Use design criteria to evaluate product-identifying both strengths and areas for development.<br><br>Consider the views of others, including intended user, whilst evaluating product. | Use design criteria to evaluate product-identifying both strengths and areas for development.<br><br>Consider the views of others, including intended user, whilst evaluating product. | Use design criteria to evaluate product-identifying both strengths and areas for development.<br><br>Consider the views of others, including intended user, whilst evaluating product. | Use design criteria to evaluate product-looking at quality of end product and design and whether it is fit for its intended purpose.<br><br>Consider the views of others, including intended user, whilst evaluating product. |

| Evaluating | Across Key Stage 1 | Early Key Stage 2 | Late Key stage 2 |
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| **Existing products** | Pupils should explore:<br>• what products are<br>• who products are for<br>• what products are for<br>• how products work<br>• where products might be used<br>• what materials products are made from<br>• what they like and dislike about products | Across KS2 pupil should investigate and analyse:<br>• how well products have been designed<br>• how well products have been made<br>• why materials have been chosen<br>• what methods of construction have been used<br>• how well products work<br>• how well products achieve their purposes<br>• how well products meet user needs and wants<br>In early KS2 pupils should also investigate and analyse:<br>• who designed and made the products<br>• where products were designed and made<br>• when products were designed and made<br>• whether products can be recycled or reused | Across KS2 pupil should investigate and analyse:<br>• how well products have been designed<br>• how well products have been made<br>• why materials have been chosen<br>• what methods of construction have been used<br>• how well products work<br>• how well products achieve their purposes<br>• how well products meet user needs and wants<br>In late KS2 pupils should also investigate and analyse:<br>• how much products cost to make<br>• how innovative products are<br>• how sustainable the materials in products are<br>• what impact products have beyond their intended purpose |

| Cooking and Nutrition | Key Stage 1 | Early Key Stage 2 | Late Key Stage 2 |
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| **Where food comes from** | Across KS1 pupils should know:<br>• that all food comes from plants or animals<br>• that food has to be farmed, grown elsewhere (e.g. home) or caught | Across KS2 pupils should know:<br>• that food is grown (such as tomatoes, wheat and potatoes), reared ( such as pigs, chickens and cattle) and caught (such as fish) in the UK, Europe and the wider world | Across KS2 pupils should know:<br>that food is grown (such as tomatoes, wheat and potatoes), reared ( such as pigs, chickens and cattle) and caught (such as fish) in the UK, Europe and the wider world<br><br>Pupils should also know:<br>• that seasons may affect the food available<br>• how food is processed into ingredients that can be eaten or used in cooking |
| **Food preparation, cooking and nutrition** | Across KS1 pupils should know:<br>• how to name and sort groups into the five groups in The Eatwell plate<br>• that everyone should eat at least five portions of fruit and vegetables every day<br>• how to prepare simple dishes safely and hygienically, without using a heat source<br>• how to use techniques such as cutting, peeling and grating | Across KS2 pupils should know:<br>• how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source<br>• how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking<br><br>In early KS2 pupils should also know:<br>• that a healthy diet is made up from a variety and balance of different food and drink, as depicted in The Eatwell plate<br>• that to be active and healthy, food and drink are needed to provide energy for the body | Across KS2 pupils should know:<br>• how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source<br>how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking<br><br>In late KS2 pupils should know:<br>• that different food and drink contain different substances – nutrients, water and fibre- that are needed for health |