



Design and Technology  
Progression in Skills



	Generating Ideas	Making	Evaluating	Technical Knowledge	Food and Nutrition
Year 1	Think of own ideas for design Use pictures and words to plan Design a product and follow a design criteria	Explain what is being made and why Select appropriate tools and equipment for the purpose	Evaluate own and existing products Say whether the product fits the design brief	Use construction materials with supervision Know about the movement of simple mechanisms such as sliders and levers	Know how to peel, cut, grate, mix and mould foods with supervision
Year 2	Think of own ideas and plan what to do next Describe designs using pictures, diagrams, models and ICT Create a design criteria Design a product	Explain what is being made Choose appropriate tools and equipment and explain some tools are more appropriate than others	Evaluate products saying which is better and why Evaluate own products highlighting positives and areas for improvement Explain how/why improvements should be made	Use construction materials competently Know about the movement of simple mechanisms such as wheels and axles Cut then join materials including textiles	Know how to peel, cut, grate, mix and mould foods with a range of shapes and textures
Year 3	Create a design that meets a range of requirements Plan the equipment and tools needed	Use a range of tools and equipment accurately	Evaluate the appearance and usability of own and existing products	Use construction materials competently Know about the movement of simple	Know how to peel, cut, grate, mix and mould foods with a range of shapes and textures

	<p>Describe a design accurately and include a labelled diagram</p> <p>Gather information to help design a product (research, asking people)</p>	<p>Measure and mark out materials and components with a degree of accuracy</p> <p>Join and assemble materials and components with a degree of accuracy</p>	<p>Explain how/why improvements should be made</p> <p>Recreate designs based on findings</p>	<p>mechanisms such as wheels and axles</p> <p>Cut then join materials including textiles using a variety of methods</p> <p>Understand seam allowances</p> <p>Use a range of finishing techniques</p>	<p>Understand changes in state when products are heated and cooled</p> <p>Begin to cook foods under supervision</p>
Year 4	<p>Generate more than one idea for how to create a product</p> <p>Gather information to help design a product (Questionnaire, mini interview, research)</p> <p>Produce a detailed plan with labelled diagrams, a written explanation and step by step instructions</p>	<p>Use a range of tools and equipment (including electricity) appropriate to the task with accuracy</p> <p>Measure and mark out materials and components accurately</p> <p>Join and assemble materials and components accurately</p>	<p>Explain how/why improvements should be made to own and existing products</p> <p>Design ways of comparing products and execute the design</p>	<p>Use construction materials competently</p> <p>Know about the movement of simple mechanisms such as levers and linkages</p> <p>Use an electrical system to make a product operate</p> <p>Use a range of finishing techniques</p>	<p>Understand changes in state when products are heated and cooled</p> <p>Design a menu around a theme</p> <p>Cook foods under supervision</p>
Year 5	<p>Generate a range of ideas after collating relevant information</p>	<p>Use a range of tools and equipment precisely</p>	<p>Evaluate the appearance of the product</p> <p>Test the function of the product in a range of</p>	<p>Use construction materials competently</p> <p>Know about the movement of simple</p>	<p>Understand changes in state when products are heated and cooled</p>

	<p>Present information gathered in a variety of ways</p> <p>Produce a detailed plan with labelled diagrams, cross-sectional drawings, computer generated designs, a written explanation and step by step instructions</p> <p>Work with constraints, refining and justifying plans as necessary</p>	<p>Consider the aesthetic qualities and functionality of the product</p> <p>Refine the product or amend the design based on the making process</p>	<p>conditions and against the original criteria</p> <p>Suggests improvements for each part of the designing and making process</p>	<p>mechanisms such as pulleys or gears</p> <p>Use a range of finishing techniques</p>	<p>Design a menu around a theme based on consumer research</p> <p>Cook foods using a range of methods under supervision</p>
Year 6	<p>Generate a range of ideas after collating relevant information</p> <p>Present information gathered in a variety of ways including as a presentation to peers</p> <p>Independently produce a detailed plan with labelled diagrams, cross-sectional drawings, computer generated designs, a written explanation and step by step instructions</p> <p>Independently work with constraints, refining and justifying plans as necessary</p>	<p>Use a range of tools and equipment precisely</p> <p>Select alternative tools to enhance the product</p> <p>Consider the aesthetic qualities and functionality of the product</p> <p>Refine the product or amend the design based on the making process</p>	<p>Evaluate the appearance of the product using a criteria generated independently</p> <p>Test the function of the product in a range of conditions and against the original criteria</p> <p>Suggests improvements for each part of the designing and making process</p> <p>Calculate cost, sale price and profit and explain reasoning</p>	<p>Use construction materials competently</p> <p>Know about the more complex switches and circuits and how they function</p> <p>Cut then join materials including textiles using a variety of methods</p> <p>Understand seam allowances</p> <p>Use a range of finishing techniques</p>	<p>Understand changes in state when products are heated and cooled</p> <p>Design a menu around a theme based on consumer research</p> <p>Sell the menu/product as appropriate</p> <p>Cook foods using a range of methods under supervision</p>