



# Our Design and Technology Adventure



## Progression of Knowledge and Skills in Design and Technology

Skills in evaluating current technology, planning, making and evaluating their own work runs through all units of work. Children will have the opportunity to work on their own, and collaboratively with others, to work on projects to develop their technical knowledge of structures, mechanism and cooking & nutrition. They will have the opportunity to evaluate past and present design and technology and develop a critical understanding of its impact on daily life and the wider world.

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Developing, planning and communicating ideas.	<p>Explain what they are making and which materials they are using.</p> <p>Use key vocabulary of designing and making (join, build, shape, longer, shorter, heavier etc.)</p> <p>Select materials from a limited range that will meet a simple design criteria e.g. shiny.</p> <p>Explore different materials freely, in order to develop their ideas about how to use them and what to make.</p> <p>Discuss their work as it progresses.</p> <p>Discusses their own ideas with a grown up or peers.</p> <p>Make imaginative and complex 'small worlds' with blocks and construction kits such as Duplo, Lego and Knex.</p> <p>Makes simple marks and drawings and explain what they mean.</p>	<p>Suggest ideas by drawing on their own and other people's experiences and explain what they are going to do</p> <p>Identify a purpose or target group for what they intend to design and make.</p> <p>Develop their design ideas through discussion, observation, drawing and modelling</p> <p>Create initial ideas and modify as required.</p> <p>Make simple drawings and label parts</p> <p>Discuss where they have been successful and what could be improved.</p>	<p>Identify a purpose and establish criteria for a successful product.</p> <p>Generate ideas, considering the proposed user.</p> <p>Develop a clear idea of what has to be done and the order it needs to be done in, planning how to use materials, equipment and processes, and suggesting alternative methods of making, if the first attempts fail</p> <p>Make labelled drawings from different views showing specific features</p> <p>Evaluate products and identify criteria that can be used for their own designs</p>	<p>Communicate their ideas through detailed labelled drawings or mind mapping</p> <p>Develop a design specification including annotations about purpose.</p> <p>Explore, develop and communicate aspects of their design proposals by modelling their ideas in a variety of ways</p> <p>Plan the order of their work, choosing appropriate materials, tools and techniques</p> <p>Use results of investigations, information sources, including ICT when developing design ideas</p>			

<p>Working with tools, equipment, materials and components to make quality products (including food and nutrition)</p>	<p>Develop fine motor skills to use a range of tools competently, safely and confidently such as scissors, paintbrushes, hole punches and staplers.</p> <p>Begin to select equipment that helps achieve a goal they have chosen or one which is suggested to them.</p> <p>Explore freely a range of ways to manipulate and join materials such as split pins, paper clips, or making simple folds or hinges.</p> <p>Begin to understand some food preparation tools, techniques and processes</p> <p>Know to wash hands without being reminded before snack and lunchtime and when handling food.</p> <p>Practice stirring, mixing, pouring, blending</p> <p>Discuss how to make an activity safe and hygienic</p> <p>Begin to understand that eating well contributes to good health</p>	<p>Make their design using appropriate techniques and tools. Use accurate vocabulary associated with the task.</p> <p>With help measure, mark out, cut and shape a range of materials</p> <p>Use some simple tools safely and appropriately e.g.</p> <p>Assemble, join and combine materials and components in order using a variety of temporary methods e.g. glues or masking tape</p> <p>Choose and use appropriate finishing techniques</p> <p>Use basic food handling, hygienic practices and personal hygiene.</p>	<p>Select appropriate tools and techniques for making their product</p> <p>Measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques</p> <p>Work safely and accurately with a range of simple tools.</p> <p>Join and combine materials and components accurately in temporary and permanent ways</p> <p>Think about their ideas as they make progress and be willing change things if this helps them improve their work</p> <p>Use finishing techniques that strengthen and improve the appearance of their product using a range of equipment including ICT</p> <p>Demonstrate hygienic food preparation and storage.</p>	<p>Select appropriate materials, tools and techniques</p> <p>Use a wider variety of skills, tools, techniques and equipment safely and accurately</p> <p>Assemble more complex components to make final product using a wider variety of permanent joining techniques</p> <p>Cut and join with accuracy to ensure a good-quality finish to the product Select appropriate tools, materials, components and techniques</p> <p>Weigh and measure accurately and independently (time, dry ingredients, liquids)</p> <p>Make modifications as they go along in light of tests and feedback</p> <p>Apply the rules for basic food hygiene and other safe practices e.g. hazards relating to the use of ovens.</p>
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<p>Evaluating processes and products</p>	<p>Return to and build on their previous learning, giving reasons for any possible changes to their designs e.g. building a structure with blocks differently.</p> <p>Dismantle, examine, talk about existing objects, tools and materials and consider their similarities and differences.</p> <p>Consider and manage some risks and begin to use some age appropriate safety measures independently.</p>	<p>Evaluate against their design criteria including discussing how well it works in relation to the purpose</p> <p>Evaluate their products as they are developed, identifying strengths and possible changes they might make.</p>	<p>Evaluate their product against original design criteria e.g. how well it meets its intended purpose both during and at the end of the assignment</p> <p>Disassemble and evaluate familiar products</p> <p>Evaluate their products carrying out appropriate tests.</p>	<p>Evaluate their products, identifying strengths and areas for development, and carrying out appropriate tests</p> <p>Record their evaluations using drawings with labels</p> <p>Evaluate against their original criteria and suggest ways that their product could be improved</p> <p>Complete self and peer evaluations for final product.</p>
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