



Design and Technology  
Curriculum Progression  
Year 1 - 4

# Design and Technology Curriculum Overview

	Autumn Term	Spring Term	Summer Term
Year 1	Structures - Freestanding Structures Design, make and evaluate Playground Equipment for the Local Park	Mechanisms – Sliders and Levers Design, make and evaluate a Moving Picture Book for the Library	Textiles – Templates and Joining Techniques Design, make and evaluate a Glove Puppet for the Bright Beginners
Year 2	Textiles - Templates and Joining Techniques Design, make and evaluate bunting for Decoration on Sports Day	Food – Preparing Fruit and Vegetables Design, make and evaluate Healthy Dips and Dippers for Chartwell's	Mechanisms – Wheels and Axles Design, make and evaluate a Moving Vehicle for the Early Explorers
Year 3	Mechanical Systems – Pneumatics Design, make and evaluate a Moving Toy for Reception	Structures – Shell Structures Design, make and evaluate a Sustainable Lunchbox for Smiggle	Textiles – 2D shape to 3D Product Design, make and evaluate a Reading Cushion for the Library
Year 4	Textiles - 2D shape to 3D Product Design, make and evaluate a Messenger Bag for a Middle School Aged Child	Electrical Systems – Simple circuits, switches, programming and control Design, make and evaluate an Head Lamp for and Archaeologist	Food – Healthy and Varied Diet Adapt, make and evaluate a Bread Recipe for Warburtons  (Support for transition to Walton)

	Explore, Research and Design	Technical Knowledge and Skills	Evaluating Processes and Products
Year 1	<p>Draw on their own experiences to help generate ideas.</p> <p>Suggest ideas and explain what they are going to do.</p> <p>Identify a target individual or group for what they intend to design and make.</p> <p>Model their ideas in card and paper.</p> <p>Develop their design ideas applying findings from their earlier research.</p>	<p>Make their design using appropriate techniques.</p> <p>With help to measure, mark out, cut and shape a range of materials.</p> <p>Use tools, e.g., scissors, stapler and a hole punch safely.</p> <p>Assemble, join and combine materials and components together using a variety of temporary methods e.g. glue, Sellotape.</p> <p>Use simple finishing techniques to improve the appearance of their product.</p>	<p>Evaluate their product by discussing how well it works in relation to the purpose.</p> <p>With support, evaluate their products as they are developed, identifying strengths and possible changes they might make.</p> <p>Evaluate their product by asking questions about what they have made and how they have gone about it.</p>

	Explore, Research and Design	Technical Knowledge and Skills	Evaluating Processes and Products	Food and Nutrition
Year 2	<p>Generate ideas by drawing on their own and other people's experiences.</p> <p>Develop their design ideas through discussion, observation, drawing and modelling.</p> <p>Identify a purpose for what they intend to design and make.</p> <p>Identify simple design criteria.</p> <p>Make simple designs and label them.</p>	<p>Begin to select tools and materials and use the correct vocabulary to name and describe them.</p> <p>Measure, cut and score with some accuracy.</p> <p>Use hand tools safely and appropriately.</p> <p>Assemble, join and combine materials to make a product.</p> <p>Cut, shape and join fabric using a running stitch.</p> <p>Select and use appropriate fruit and vegetables, processes and tools.</p> <p>Follow safe procedures for food safety, handling and hygiene.</p> <p>Choose and use appropriate finishing techniques.</p>	<p>Evaluate their product against their design criteria.</p> <p>Evaluate their products as they are developed, identifying strengths and possible changes they might make.</p> <p>Discuss their products, explaining what they like and dislike about them.</p>	<p>Understand that all food comes from plants or animals.</p> <p>Know that food has been farmed, grown elsewhere (e.g. at home) or caught.</p> <p>Know that everyone should eat at least five portions of fruit and vegetables a day.</p> <p>Know how to prepare simple dishes safely and hygienically with or without using a heat source.</p> <p>Demonstrate how to use techniques such as cutting, peeling and grating.</p>

	Explore, Research and Design	Technical Knowledge and Skills	Evaluating Processes and Products
Year 3	<p>Generate ideas for a product, considering its purpose and user/s.</p> <p>Identify a purpose and establish criteria for a successful product.</p> <p>Plan the order of their work before starting.</p> <p>Explore, develop and communicate design proposals by modelling ideas.</p> <p>Make designs and annotate when designing.</p>	<p>Select tools and techniques for making their product.</p> <p>Measure, mark out, cut, score and assemble components with more accuracy.</p> <p>Work safely and accurately with a range of simple tools.</p> <p>Think about their ideas as they make progress and be willing to change things if this helps them to improve their work.</p> <p>Measure, tape or pin, cut and join fabric with some accuracy.</p> <p>Use finishing techniques to strengthen and improve the appearance of their product using a range of equipment including ICT.</p>	<p>Evaluate their product against their original design criteria e.g., how well it meets its intended purpose.</p> <p>Disassemble and evaluate familiar products.</p>

	Explore, Research and Design	Technical Knowledge and Skills	Evaluating Processes and Products	Food and Nutrition
Year 4	<p>Generate ideas, considering the purposes for which they are designing.</p> <p>Make annotated drawings from different viewpoints showing specific features.</p> <p>Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making if the first attempt fails.</p> <p>Evaluate products and identify criteria. That can be used for their own designs.</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>Join and combine materials and components accurately in temporary and permanent ways.</p> <p>Sew using a range of different stitches.</p> <p>Measure, tape or pin, cut and join fabric with accuracy.</p>	<p>Evaluate their work both during and at the end of the assignment.</p> <p>Evaluate their products carrying out appropriate tests.</p>	<p>Understand that food is grown, reared and caught in the UK, Europe and the wider world.</p> <p>Understand how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source.</p> <p>Know how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking.</p> <p>Know that a healthy diet is made up from a variety and balance of different food and drink.</p> <p>Know that to be active and healthy, food and drink are needed to provide energy for the body.</p>