

Design Technology Progression in EYFS

	Design	Make	Evaluate	Technical Knowledge	Food and Nutrition
EYFS	<p>Begin to use the language of designing and making, e.g. join, build and shape.</p> <p>Learning about planning and adapting initial ideas to make them better.</p>	<p>To learn to construct with a purpose in mind.</p> <p>-Selects tools and techniques needed to shape, assemble and join materials.</p>	<p>Begin to talk about changes made during the making process, e.g. making a decision to use a different joining method.</p>	<p>To learn how to use a range of tools, e.g. scissors, hole punch, stapler, woodworking tools, rolling pins, pastry cutters. -Learn how everyday objects work by dismantling things.</p>	<p>To begin to understand some of the tools, techniques and processes involved in food preparation.</p> <p>Children have basic hygiene awareness.</p>

Design Technology Progression Map KS1/KS2

Designing	Key Stage 1	Key Stage 2
<p>Understanding contexts, users and purpose</p>	<p>Across KS1 pupils should:</p> <p>Work confidently within a range of contexts, such as imaginary, story based, home, school, gardens, playgrounds, local community, industry and the wider environment</p> <p>State what products they are designing and making</p> <p>Say whether their products are for themselves or other users</p> <p>Describe what their products are for</p> <p>Say how their products will work</p>	<p>Across KS2 pupils should:</p> <p>Work confidently within a range of contexts, such as the home, school, leisure, culture, enterprise, industry and the wider environment</p> <p>Describe the purpose of their products</p> <p>Indicate the design features of their products that will appeal to intended users</p> <p>Explain how particular parts of their products work</p>

	<p>Say how they will make their products suitable for their intended users</p> <p>Use simple design criteria to help develop their ideas</p>	<p>In early KS2 pupils should also:</p> <p>Gather information about the needs and wants of particular individuals and groups</p> <p>Develop their own design criteria and use these to inform their ideas</p> <p>In Late KS2 pupils should also:</p> <p>Carry out research, using surveys, interviews, questionnaires and web-based resources</p> <p>Identify the needs, wants, preferences and values of particular individuals and groups</p> <p>Develop a simple design specification to guide their thinking</p>
<p>Generating, developing, modelling and communicating ideas</p>	<p>Across KS1 pupils should:</p> <p>Generate ideas by drawing on their own experiences</p> <p>Use knowledge of existing products to help come up with ideas</p> <p>Develop and communicate ideas by talking and drawing</p> <p>Model ideas by exploring materials, components and construction kits and by making templates and mock-ups</p> <p>Use information and communication technology, where appropriate, to develop and communicate their ideas</p>	<p>Across KS2 pupils should:</p> <p>Share and clarify ideas through discussion</p> <p>Model their ideas using prototypes and pattern pieces</p> <p>Use annotated sketches, cross-sectional drawings and exploded diagrams to develop and communicate their ideas</p> <p>Use computer-aided design to develop and communicate this ideas</p> <p>In early KS2 pupils should also:</p> <p>Generate realistic ideas, focusing on the needs of the user</p>

		<p>Make design decisions that take account of the availability of resources</p> <p>In Late KS2 pupils should also:</p> <p>Generate innovative ideas, drawing on research</p> <p>Make design decisions, taking account of constraints such as time, resources and cost</p>
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Making	Key Stage 1	Key Stage 2
<p>Planning</p>	<p>Across KS1 pupils should:</p> <p>Plan by suggesting what to do next</p> <p>Select from a range of tools and equipment, explaining their choices</p> <p>Select from a range of materials and components according to their characteristics</p>	<p>Across KS2 pupils should:</p> <p>Select tools and equipment suitable for the task</p> <p>Explain their choice of tools and equipment in relation to the skills and techniques they will be using</p> <p>Select materials and components suitable for the task</p> <p>Explain their choice of materials and components according to functional properties and aesthetic qualities</p> <p>In early KS2 pupils should also:</p> <p>Order the main stages of making</p> <p>In Late KS2 pupils should also:</p> <p>Produce appropriate lists of tools, equipment and materials that they need</p>

		Formulate step-by-step plans as a guide to making
Practical skills and techniques	<p>Across KS1 pupils should:</p> <p>Follow procedures for safety and hygiene</p> <p>Use a range of materials and components, including construction materials and kits, textiles, food ingredients and mechanical components</p> <p>Assemble, join and combine materials and components</p> <p>Use finishing techniques, including those from art and design</p>	<p>Across KS2 pupils should:</p> <p>Follow procedures for safety and hygiene</p> <p>Use a wider range of materials and components than KS1, including construction materials and kits, textiles, food ingredients, mechanical components and electrical components</p> <p>In early KS2 pupils should also:</p> <p>Measure, mark out, cut and shape materials and components with some accuracy</p> <p>Assemble, join and combine materials and components with some accuracy</p> <p>Apply a range of finishing techniques, including those from art and design, with some accuracy</p> <p>In Late KS2 pupils should also:</p> <p>Accurately measure, mark out, cut and shape materials and components</p> <p>Accurately assemble, join and combine materials and components</p> <p>Accurately apply a range of finishing techniques, including those from art and design</p> <p>Use techniques that involve a number of steps</p> <p>Demonstrate resourcefulness when tackling practical problems</p>

Evaluating	Key Stage 1	Key Stage 2
Own ideas and products	<p>Across KS1 pupils should:</p> <p>Talk about their design ideas and what they are making</p> <p>Make simple judgements about their products and ideas against design criteria</p> <p>Suggest how their products could be improved</p>	<p>Across KS2 pupils should:</p> <p>Identify the strengths and areas for development in their ideas and products</p> <p>Consider the views of others, including intended users, to improve their work</p> <p>In early KS2 pupils should also:</p> <p>Refer to their design criteria as they design and make</p> <p>Use their design criteria to evaluate their completed products</p> <p>In Late KS2 pupils should also:</p> <p>Critically evaluate the quality of the design, manufacture and fitness for purpose of their products as they design and make</p> <p>Evaluate their ideas and products against their original design specification</p>
Existing products	<p>Across KS1 pupils should:</p> <p>What products are</p> <p>Who products are for</p> <p>What products are for</p> <p>How products work</p>	<p>Across KS2 pupils should:</p> <p>How well products have been designed</p> <p>How well products have been made</p> <p>Why materials have been chosen</p> <p>What methods of construction have been used</p>

	<p>How products are used</p> <p>Where products might be used</p> <p>What materials products are made from</p> <p>What they like and dislike about products</p>	<p>How well products work</p> <p>How well products achieve their purposes</p> <p>How well products meet user needs and wants</p> <p>In early KS2 pupils should also:</p> <p>Who designed and made the products</p> <p>Where products were designed and made</p> <p>When products were designed and made</p> <p>Whether products can be recycled or reused</p> <p>In Late KS2 pupils should also:</p> <p>How much products cost to make</p> <p>How innovative products are</p> <p>How sustainable the materials in products are</p> <p>What impact products have beyond their intended purpose</p>
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Technical Knowledge	Key Stage 1	Key Stage 2
Making products work	Across KS1 pupils should know:	Across KS2 pupils should know:

	<p>About the simple working characteristics of materials and components</p> <p>About the movement of simple mechanisms such as levers, sliders, wheels and axles</p> <p>How freestanding structures can be made stronger, stiffer and more stable</p> <p>That a 3d textiles product can be assembled from two identical fabric shapes</p> <p>That food ingredients should be combined according to their sensory characteristics</p> <p>The correct technical vocabulary for the projects they are undertaking</p>	<p>How to use learning from science to help design and make products that work</p> <p>How to use learning from mathematics to help design and make products that work</p> <p>That materials have both functional properties and aesthetic qualities</p> <p>That materials can be combined and mixed to create more useful characteristics</p> <p>That mechanical and electrical systems have an input, process and output</p> <p>The correct technical vocabulary for the projects they are undertaking</p> <p>In early KS2 pupils should also know:</p> <p>How mechanical systems such as levers and linkages or pneumatic systems create movement</p> <p>How simple electrical circuits and components can be used to create functional products</p> <p>How to program a computer to control their products</p> <p>How to make strong, stiff shell structures</p> <p>That a single fabric shape can be used to make a 3d textiles product</p> <p>That food ingredients can be fresh, pre-cooked and processed</p>
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Cooking and nutrition	Key Stage 1	Key Stage 2
<p>Where food comes from</p>	<p>Across KS1 pupils should know:</p> <p>That all food comes from plants or animals</p> <p>That food has to be farmed, grown elsewhere (e.g. home) or caught</p>	<p>Across KS2 pupils should:</p> <p>That food is grown (such as tomatoes, wheat etc), reared (such as chickens and cattle) and caught (such as fish) in the UK, Europe and the world</p> <p>In Late KS2 pupils should also:</p> <p>That seasons may affect the food available</p>

		How food is processed into ingredients that can be eaten or used in cooking
Food preparation, cooking and nutrition	<p>Across KS1 pupils should know:</p> <p>How to name and sort foods into the five groups in The Eatwell Plate</p> <p>That everyone should eat at least five portions of fruit and vegetables every day</p> <p>How to prepare simple dishes safely and hygienically, without using a heat source</p> <p>How to use techniques such as cutting, peeling and grating</p>	<p>Across KS2 pupils should:</p> <p>How to prepare and cook a variety of predominatntly savoury dishes safely and hygienically including, where appropriate, the use of a heat source</p> <p>How to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking</p> <p>In early KS2 pupils should also:</p> <p>That a healthy diet is made up from a variety and balance of different food and drink (The Eatwell Plate)</p> <p>That to be active and healthy, food and drink are needed to provide energy for the body</p> <p>In Late KS2 pupils should also:</p> <p>That recipes can be adapted to change the appearance, taste, texture and aroma</p> <p>That different food and drink contain different substances-nutrients, water and fibre – that are needed for health</p>

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Developing, planning and communicating ideas.	<ul style="list-style-type: none"> • Draw on their own experience to help generate ideas • Suggest ideas and explain what they are going to do • Identify a target group for what they intend to design and make • Model their ideas in card and paper • Develop their design ideas applying findings from their earlier research 	<ul style="list-style-type: none"> • Generate ideas by drawing on their own and other people's experiences • Develop their design ideas through discussion, observation, drawing and modelling • Identify a purpose for what they intend to design and make • Identify simple design criteria • Make simple drawings and label parts 	<ul style="list-style-type: none"> • Generate ideas for an item, considering its purpose and the user's • Identify a purpose and establish criteria for a successful product. • Plan the order of their work before starting • Explore, develop and communicate design proposals by modelling ideas • Make drawings with labels when designing 	<ul style="list-style-type: none"> • Generate ideas, considering the purposes for which they are designing • Make labelled drawings from different views showing specific features • 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 attempts fail • Evaluate products and identify criteria that can be used for their own designs 	<ul style="list-style-type: none"> • Generate ideas through brainstorming and identify a purpose for their product • Draw up a specification for their design • 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 attempts fail • Use results of investigations, information sources, including ICT when developing design ideas 	<ul style="list-style-type: none"> • Communicate their ideas through detailed labelled drawings • Develop a design specification • Explore, develop and communicate aspects of their design proposals by modelling their ideas in a variety of ways • Plan the order of their work, choosing appropriate materials, tools and techniques
Working with tools, equipment, materials and components to make quality products (inc-food)	<ul style="list-style-type: none"> • Make their design using appropriate techniques • With help measure, mark out, cut and shape a range of materials • Use tools eg scissors and a hole punch safely • Assemble, join and combine materials and components together using a variety of temporary methods e.g. glues or masking tape • Select and use appropriate fruit and vegetables, processes and tools • Use basic food handling, hygienic practices and personal hygiene • Use simple finishing techniques to improve the appearance of their product 	<ul style="list-style-type: none"> • Begin to select tools and materials; use vocab' to name and describe them • Measure, cut and score with some accuracy • Use hand tools safely and appropriately • Assemble, join and combine materials in order to make a product • Cut, shape and join fabric to make a simple garment. Use basic sewing techniques • Follow safe procedures for food safety and hygiene • Choose and use appropriate finishing techniques 	<ul style="list-style-type: none"> • Select tools and techniques for making their product • Measure, mark out, cut, score and assemble components with more accuracy • Work safely and accurately with a range of simple tools • Think about their ideas as they make progress and be willing change things if this helps them improve their work • Measure, tape or pin, cut and join fabric with some accuracy • Demonstrate hygienic food preparation and storage • Use finishing techniques strengthen and improve the appearance of their product using a range of equipment including ICT 	<ul style="list-style-type: none"> • Select appropriate tools and techniques for making their product • Measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques • Join and combine materials and components accurately in temporary and permanent ways • Sew using a range of different stitches, weave and knit • Measure, tape or pin, cut and join fabric with some accuracy • Use simple graphical communication techniques 	<ul style="list-style-type: none"> • Select appropriate materials, tools and techniques • Measure and mark out accurately • Use skills in using different tools and equipment safely and accurately • Weigh and measure accurately (time, dry ingredients, liquids) • Apply the rules for basic food hygiene and other safe practices e.g. hazards relating to the use of ovens • Cut and join with accuracy to ensure a good-quality finish to the product 	<ul style="list-style-type: none"> • Select appropriate tools, materials, components and techniques • Assemble components make working models • Use tools safely and accurately • Construct products using permanent joining techniques • Make modifications as they go along • Pin, sew and stitch materials together create a product • Achieve a quality product
Evaluating processes and products	<ul style="list-style-type: none"> • Evaluate their product by discussing how well it works in relation to the purpose • Evaluate their products as they are developed, identifying strengths and possible changes they might make • Evaluate their product by asking questions about what they have made and how they have gone about it 	<ul style="list-style-type: none"> • Evaluate against their design criteria • Evaluate their products as they are developed, identifying strengths and possible changes they might make • Talk about their ideas, saying what they like and dislike about them 	<ul style="list-style-type: none"> • Evaluate their product against original design criteria e.g. how well it meets its intended purpose • Disassemble and evaluate familiar products 	<ul style="list-style-type: none"> • Evaluate their work both during and at the end of the assignment • Evaluate their products carrying out appropriate tests 	<ul style="list-style-type: none"> • Evaluate a product against the original design specification • Evaluate it personally and seek evaluation from others 	<ul style="list-style-type: none"> • Evaluate their products, identifying strengths and areas for development, and carrying out appropriate tests • Record their evaluations using drawings with labels • Evaluate against their original criteria and suggest ways that their product could be improved