



Aims	Key Element	Key Skills	Rec	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Develop and create, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world.	Designing	Generating ideas Explain Design	Manipulates materials to achieve a planned effect. <small>SEP</small> Early Learning Goal Children use what they have learnt about media and materials in original ways, thinking about uses and purposes. They represent their own ideas, thoughts and feelings through design and technology, art.	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 on card and paper. Develop their design ideas applying findings from their earlier research	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	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.	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.	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.	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.
Build and apply a repertoire of knowledge, understanding and skills in order to design and make high quality prototypes and products for a wide range of users.	Making	Using tools effectively Measure Cut Assemble Join Test	Constructs with a purpose in mind, using a variety of resources. <small>SEP</small> Selects tools and techniques needed to shape, assemble and join materials they are using. <small>SEP</small> Early Learning Goal <small>SEP</small> They safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. <small>SEP</small>	Make their design using appropriate techniques. With help measure, mark out, cut and shape a range of materials. Use tools <i>eg scissors and a hole punch</i> safely. Assemble, join and combine materials and components together using a variety of temporary methods e.g. glues or masking tape. Use simple finishing techniques to improve the appearance of their product. Make a product with a movement using levers and sliders.	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. Choose and use appropriate finishing techniques. Make a product with a movement using wheels and axels.	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 to change things if this helps them improve their work. Measure, tape or pin, cut and join fabric with some accuracy. Use finishing techniques to strengthen and improve the appearance of their product using a range of equipment including ICT.	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.	Select appropriate materials, tools and techniques. Measure and mark out accurately. Use skills when using different tools and equipment safely and accurately. Cut and join with accuracy to ensure a good-quality finish to the product.	Select appropriate tools, materials, components and techniques. Assemble components to 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 to create a product. Achieve a quality product.



<p>Critique, evaluate and test their ideas and products and the work of others.</p>	<p>Evaluating</p>	<p>Evaluate Reflect Refine Question</p>	<p>Selects appropriate resources and adapts work where necessary.</p>	<p>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.</p>	<p>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.</p>	<p>Evaluate their product against original design criteria <i>e.g. how well it meets its intended purpose</i>. Disassemble and evaluate familiar products.</p>	<p>Evaluate their work both during and at the end of the assignment. Evaluate their products carrying out appropriate tests.</p>	<p>Evaluate a product against the original design specification. Evaluate it personally and seek evaluation from others.</p>	<p>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.</p>
	<p>Technical Knowledge</p>	<p>Terminology Understanding tools and techniques</p>	<p>Understands that different media can be combined to create new effects.</p>	<p>The children should know about the simple working characteristics of materials and components. Know about the movement of simple mechanisms such as levers and sliders. Know how freestanding structures can be made stronger, stiffer and more stable.</p>	<p>Begin to select tools and materials; use vocab' to name and describe them. Know about the movement of simple mechanisms such as wheels and axels. Know about the simple working characteristics of materials and components. Know the correct vocabulary for the projects they are undertaking</p>	<p>Know how mechanical systems such as levers and linkages or pneumatic systems create movement. Know how to make strong and stiff shell structures.</p>	<p>Know that a 3D textiles product can be assembled from two identical fabric shapes. Know that single fabric shape can be used to make a 3D textiles product.</p>	<p>Know how to reinforce and strengthen a 3D framework.</p>	<p>Know how mechanical systems such as cams or pulleys or gears create movement.</p>
<p>Understand and apply the principles of nutrition and learn how to cook.</p>	<p>Cooking and Nutrition</p>	<p>Using tools effectively Cutting Grating Mixing</p>		<p>Select and use appropriate fruit and vegetables, processes and tools. Use basic food handling, hygienic practices and personal hygiene. Know that all food comes from plants or animals. Know how to name and sort foods into the five groups in The eatwell plate. Know that everyone should eat at least 5 portions of fruit and vegetables every day.</p>	<p>Follow safe procedures for food safety and hygiene. Know that food ingredients should be combined according to their sensory characteristics. Know that food has to be farmed, grown elsewhere or caught. Prepare simple dishes safely and hygienically, without using a heat source. Know how to use techniques such as cutting, peeling and grating.</p>	<p>Demonstrate hygienic food preparation and storage. Know how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking. Know that a healthy diet is made up from a variety and balance of different food and drink as depicted in the Eatwell Plate.</p>	<p>Know that food ingredients can be fresh, precooked or processed. Know that food is grown, reared and caught. Know that to be active and healthy, food and drink are needed to provide energy for the body.</p>	<p>Weigh and measure accurately (time, dry ingredients, liquids) Apply the rules for basic food hygiene and other safe practices <i>e.g. hazards relating to the use of ovens</i>. Know how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source. Know that different food and drink contain different substances, nutrients, water and fibre that are needed for health.</p>	<p>Know how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source. Know that recipes can be adapted to change the appearance, taste, texture and aroma.</p>