



British Section: Design and Technology Curriculum Overview

Skill	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Developing, planning and communicating ideas	<p>Begin to draw on their own experience to help generate ideas and research conducted on criteria.</p> <p>Begin to understand the development of existing products: What they are for, how they work, materials used. Start to suggest ideas and explain what they are going to do.</p> <p>Understand how to identify a target group for what they intend to design and make based on a design criteria.</p> <p>Begin to develop their ideas through talk and drawings. Make templates and</p>	<p>Start to generate ideas by drawing on their own and other people's experiences.</p> <p>Begin to 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>Understand how to identify a target group for what they intend to design and make based on a design criteria.</p>	<p>With growing Confidence generate ideas for an item, considering its purpose and the user/s.</p> <p>Start to order the main stages of making a product. Identify a purpose and establish criteria for a successful product.</p> <p>Understand how well products have been designed, made, what materials have been used and the construction technique.</p> <p>Learn about inventors, designers, engineers, chefs and manufacturers who have developed ground-breaking products.</p>	<p>Start to generate ideas, considering the purposes for which they are designing- link with Mathematics and Science.</p> <p>Confidently make labelled drawings from different views 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 attempts fail. Identify the strengths and areas for development in their ideas and products.</p> <p>When planning consider the views of</p>	<p>Start to generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces.</p> <p>Begin to use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose.</p> <p>With growing confidence apply a range of finishing techniques, including those from art and design.</p> <p>Draw up a specification for their design- link with Mathematics and Science. Use results of investigations,</p>	<p>Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, and pattern pieces.</p> <p>Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose.</p> <p>Accurately apply a range of finishing techniques, including those from art and design.</p> <p>Draw up a specification for their design- link with Mathematics and Science.</p>

	mock ups of their ideas in card and paper or using ICT	Develop their ideas through talk and drawings and label parts. Make templates and mock ups of their ideas in card and paper or using ICT.	Start to understand whether products can be recycled or Know to make drawings with labels when designing. When planning explain their choice of materials and components including function and aesthetics	others, including intended users, to improve their work. Learn about inventors, designers, engineers, chefs and manufacturers who have developed ground-breaking products. When planning explain their choice of materials and components according to function and aesthetic	information sources, including ICT when developing design ideas. With growing confidence select appropriate materials, tools and techniques. Start to understand how much products cost to make, how sustainable and innovative they are and the impact products have beyond their intended purpose.	Plan the order of their work, choosing appropriate materials, tools and techniques. Suggest alternative methods of making if the first attempts fail. Identify the strengths and areas for development in their ideas and products. Know how much products cost to make, how sustainable and innovative they are and the impact products have beyond their intended purpose
Skill	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Working with tools, equipment, materials and components to make quality products	Begin to make their design using appropriate techniques. Begin to build structures, exploring how they can be made stronger,	Begin to select tools and materials; use correct vocabulary to name and describe them. Build structures, exploring how	Select a wide range of tools and techniques for making their product i.e. construction materials and kits, textiles, food ingredients, mechanical components and electrical components.	Select a wide of tools and techniques for making their product safely. Know how to measure, mark out, cut and shape a range of materials, using appropriate tools,	Select appropriate materials, tools and techniques e.g. cutting, shaping, joining and finishing, accurately. Select from and use a wider range of materials and components, including construction	Confidently select appropriate tools, materials, components and techniques and use them. Use tools safely and accurately.

	<p>stiffer and more stable.</p> <p>Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.</p> <p>With help measure, mark out, cut and shape a range of materials.</p> <p>Explore using tools e.g. scissors and a hole punch safely.</p> <p>Begin to assemble, join and combine materials and components together using a variety of temporary methods e.g. glues or masking tape.</p> <p>Begin to use simple finishing techniques to improve the appearance of their product.</p>	<p>they can be made stronger, stiffer and more stable.</p> <p>With help measure, cut and score with some accuracy. Learn to use hand tools safely and appropriately.</p> <p>Start to assemble, join and combine materials in order to make a product.</p> <p>Demonstrate how to cut, shape and join fabric to make a simple product. Use basic sewing techniques.</p> <p>Start to choose and use appropriate finishing techniques based on own ideas.</p>	<p>Explain their choice of tools and equipment in relation to the skills and techniques they will be using.</p> <p>Start to understand that mechanical and electrical systems have an input, process and output.</p> <p>Start to understand that mechanical systems such as levers and linkages or pneumatic systems create movement.</p> <p>Know how simple Electric circuits and components can be used to create functional products.</p> <p>Measure, mark out, cut, score and assemble components with more accuracy.</p>	<p>equipment and techniques.</p> <p>Start to join and combine materials and components accurately in temporary and permanent ways.</p> <p>Know how mechanical systems such as cams or pulleys or gears create movement.</p> <p>Understand how more complex electrical circuits and components can be used to create functional products.</p> <p>Continue to learn how to program computer to monitor changes in the environment and control their products.</p> <p>Understand how to reinforce and strengthen a 3D framework. Now sew</p>	<p>materials, textiles and ingredients, according to their functional properties and aesthetic qualities.</p> <p>Understand how mechanical systems such as cams or pulleys or gears create movement.</p> <p>Know how more complex electrical circuits and components can be used to create functional products and how to program a computer to monitor changes in the environment and control their products.</p> <p>Understand that mechanical and electrical systems have an input, process and output.</p> <p>Begin to measure and mark out more accurately.</p> <p>Demonstrate how to use skills in using different tools and equipment safely and accurately with</p>	<p>Assemble components to make working models.</p> <p>Aim to make and to achieve a quality product.</p> <p>With confidence pin, sew and stitch materials together to create a product.</p> <p>Demonstrate when make modifications as they go along.</p> <p>Construct products using permanent joining techniques.</p> <p>Understand how mechanical systems such as cams or pulleys or gears create movement.</p> <p>Know how more complex electrical circuits and components can be used to create functional products and how to program a</p>
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Skill	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Evaluating processes and products	<p>Start to evaluate their product by discussing how well it works in relation to the purpose (design criteria).</p> <p>When looking at existing products explain what they</p>	<p>Evaluate their work against their design criteria.</p> <p>Look at a range of existing products explain what they like and dislike about products and why.</p>	<p>Start to evaluate their product against original design criteria e.g. how well it meets its intended purpose</p> <p>Begin to disassemble and evaluate familiar products and consider</p>	<p>Evaluate their products carrying out appropriate tests.</p> <p>Start to evaluate their work both during and at the end of the assignment.</p>	<p>Start to evaluate a product against the original design specification and by carrying out tests.</p> <p>Evaluate their work both during and at the end of the assignment.</p>	<p>Evaluate products, identifying strengths and areas for development, and carrying out appropriate tests.</p> <p>Evaluate their work both during and at the end of the assignment.</p>

	<p>like and dislike about products and why.</p> <p>Begin to evaluate their products as they are developed, identifying strengths and possible changes they might make.</p>	<p>Start to evaluate their products as they are developed, identifying strengths and possible changes they might make.</p> <p>With confidence talk about their ideas, saying what they like and dislike about them.</p>	<p>the views of others to improve them.</p> <p>Evaluate the key designs of individuals in design and technology has helped shape the world.</p>	<p>Be able to disassemble and evaluate familiar products and consider the views of others to improve them.</p> <p>Evaluate the key designs of individuals in design and technology has helped shape the world.</p>	<p>Begin to evaluate it personally and seek evaluation from others.</p> <p>Evaluate the key designs of individuals in design and technology has helped shape the world.</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>Evaluate the key designs of individuals in design and technology has helped shape the world.</p>
Skill	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Food and Nutrition	<p>Begin to understand that all food comes from plants or animals.</p> <p>Explore the understanding that food has to be farmed, grown elsewhere (e.g. home) or caught.</p> <p>Start to understand how to name and sort foods into the</p>	<p>Understand that all food comes from plants or animals.</p> <p>Know that food has to be farmed, grown elsewhere (e.g. home) or caught.</p> <p>Understand how to name and sort foods into the five groups in 'The Eat well plate'</p>	<p>Start to know that food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chickens and cattle) and caught (such as fish) 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</p>	<p>Understand that food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chickens and cattle) and caught (such as fish) in the UK, Europe and the wider world.</p> <p>Understand how to prepare and cook a variety of predominantly savoury dishes safely and</p>	<p>Understand that food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chickens and cattle) and caught (such as fish) in the UK, Europe and the wider world.</p> <p>Begin to understand that seasons may affect the food available.</p> <p>Understand how food is processed into</p>	<p>Know that food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chickens and cattle) and caught (such as fish) in the UK, Europe and the wider world.</p> <p>Understand that seasons may affect the food available.</p> <p>Understand how food is processed into ingredients that can be</p>

<p>five groups in 'The Eat well plate'</p> <p>Begin to understand that everyone should eat at least five portions of fruit and vegetables every day.</p> <p>Know how to prepare simple dishes safely and hygienically, without using a heat source. Know how to use techniques such as cutting, peeling and grating.</p>	<p>Know that everyone should eat at least five portions of fruit and vegetables every day.</p> <p>Demonstrate how to prepare simple dishes safely and hygienically, without using a heat source.</p> <p>Demonstrate how to use techniques such as cutting, peeling and grating.</p>	<p>including, where appropriate, the use of a heat source.</p> <p>Begin to understand how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking.</p> <p>Start to understand that a healthy diet is made up from a variety and balance of different food and drink, as depicted in 'The Eat well plate'</p> <p>Begin to know that to be active and healthy, food and drink are needed to provide energy for the body</p>	<p>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, as depicted in 'The Eat well plate'</p> <p>Know that to be active and healthy, food and drink are needed to provide energy for the body</p>	<p>ingredients that can be eaten or used in cooking.</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.</p> <p>Start to understand how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking.</p> <p>Begin to understand that different food and drink contain different substances – nutrients, water and fibre – that are needed for health</p>	<p>eaten or used in cooking.</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.</p> <p>Understand how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking.</p> <p>Know different food and drink contain different substances – nutrients, water and fibre – that are needed for health.</p>
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EYFS area of learning	30-50 MONTHS (usually FS1)	40-60 MONTHS (usually FS2)
<p>Physical Development:</p> <p>Moving and Handling</p>	<ul style="list-style-type: none"> • Draws lines and circles using gross motor movements. • Uses one-handed tools and equipment, e.g. makes snips in paper with child scissors. • Holds pencil between thumb and two fingers, no longer 	<ul style="list-style-type: none"> • Uses simple tools to effect changes to materials. • Handles tools, objects, construction and malleable materials safely and with increasing control. • Shows a preference for a dominant hand. • Begins to use

<p>Health and self-care</p>	<p>using whole-hand grasp. • Holds pencil near point between first two fingers and thumb and uses it with good control.</p>	<p>anticlockwise movement and retrace vertical lines. • Uses a pencil and holds it effectively to form recognisable letters, most of which are correctly formed.</p> <p>Early Learning Goal (end of FS2) Children show good control and co-ordination in large and small movements. They handle equipment and tools effectively, including pencils for writing.</p>
	<ul style="list-style-type: none"> • Understands that equipment and tools have to be used safely. 	<ul style="list-style-type: none"> • Shows understanding of the need for safety when tackling new challenges, and considers and manages some risks. • Shows understanding of how to transport and store equipment safely. • Practices some appropriate safety measures without direct supervision. • Shows some understanding that good practices with regard to exercise, eating, sleeping and hygiene can contribute to good health. <p>Early Learning Goal Children know the importance for good health of physical exercise, and a healthy diet, and talk about ways to keep healthy and safe.</p>
<p>Communication and Language:</p> <p>Understanding</p>	<ul style="list-style-type: none"> • Understands use of objects (e.g. “What do we use to cut things?”) • Shows understanding of prepositions such as ‘under’, ‘on top’, ‘behind’ by carrying out an action or selecting correct picture. • Responds to simple instructions, e.g. to get or put away an object. • Beginning to understand ‘why’ and ‘how’ questions. 	<ul style="list-style-type: none"> • Responds to instructions involving a two-part sequence. Understands humour, e.g. nonsense rhymes, jokes. • Able to follow a story without pictures or props. • Listens and responds to ideas expressed by others in conversation or discussion. <p>Early Learning Goal Children follow instructions involving several ideas or actions. They answer ‘how’ and ‘why’ questions about their experiences and in response to stories or events</p>

<p>Speaking</p>	<ul style="list-style-type: none"> • Uses talk to connect ideas, explain what is happening and anticipate what might happen next, recall and relive past experiences. • Questions why things happen and gives explanations. Asks e.g. who, what, when, how. Uses vocabulary focused on objects and people that are of particular importance to them. • Builds up vocabulary that reflects the breadth of their experiences. 	<ul style="list-style-type: none"> • Extends vocabulary, especially by grouping and naming, exploring the meaning and sounds of new words. • Uses language to imagine and recreate roles and experiences in play situations. • Links statements and sticks to a main theme or intention. • Uses talk to organise, sequence and clarify thinking, ideas, feelings and events. • Introduces a storyline or narrative into their play. <p>Early Learning Goal Children express themselves effectively, showing awareness of listeners' needs. They use past, present and future forms accurately when talking about events that have happened or are to happen in the future. They develop their own narratives and explanations by connecting ideas or events.</p>
<p>Literacy:</p> <p>Writing</p>	<ul style="list-style-type: none"> • Sometimes gives meaning to marks as they draw and paint. • Ascribes meanings to marks that they see in different places. 	<ul style="list-style-type: none"> • Gives meaning to marks they make as they draw, write and paint. • Begins to break the flow of speech into words. • Continues a rhyming string. • Hears and says the initial sound in words. • Can segment the sounds in simple words and blend them together. • Links sounds to letters, naming and sounding the letters of the alphabet. • Uses some clearly identifiable letters to communicate meaning, representing some sounds correctly and in sequence. • Writes own name and other things such as labels, captions. • Attempts to write short sentences in meaningful contexts. <p>Early Learning Goal Children use their phonic knowledge to write words in ways which match their spoken sounds. They also write some irregular common words. They write simple</p>

		sentences which can be read by themselves and others. Some words are spelt correctly and others are phonetically plausible.
<p>Mathematics:</p> <p>Shape, space and measure</p>	<ul style="list-style-type: none"> • Shows an interest in shape and space by playing with shapes or making arrangements with objects. • Shows awareness of similarities of shapes in the environment. • Uses positional language. • Shows interest in shape by sustained construction activity or by talking about shapes or arrangements. • Shows interest in shapes in the environment. • Uses shapes appropriately for tasks. • Beginning to talk about the shapes of everyday objects. 	<ul style="list-style-type: none"> • Beginning to use mathematical names for 'solid' 3D shapes and 'flat' 2D shapes, and mathematical terms to describe shapes. • Selects a particular named shape. • Can describe their relative position such as 'behind' or 'next to'. • Uses familiar objects and common shapes to create and recreate patterns and build models. <p>Early Learning Goal Children use everyday language to talk about size, weight, capacity, position, to compare quantities and objects and to solve problems. They recognise, create and describe patterns. They explore characteristics of everyday objects and shapes and use mathematical language to describe them.</p>
<p>Understanding the world:</p> <p>Technology</p>	<ul style="list-style-type: none"> • Knows how to operate simple equipment, e.g. turns on CD player and uses remote control. • Shows an interest in technological toys with knobs or pulleys, or real objects such as cameras or mobile phones. • Shows skill in making toys work by pressing parts or lifting flaps to achieve effects such as sound, movements or new images. • Knows that information can be retrieved from computers 	<ul style="list-style-type: none"> • Completes a simple program on a computer. • Uses ICT hardware to interact with age-appropriate computer software. <p>Early Learning Goal Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes.</p>
<p>Expressive arts and design:</p> <p>Exploring and using media and materials</p>	<ul style="list-style-type: none"> • Understands that they can use lines to enclose a space, and then begin to use these shapes to represent objects. • Beginning to be interested in and describe the texture of things. • Uses various construction materials. • Beginning to construct, stacking blocks 	<ul style="list-style-type: none"> • Experiments to create different textures. • Understands that different media can be combined to create new effects. • Manipulates materials to achieve a planned effect. • Constructs with a purpose in mind,

	<p>vertically and horizontally, making enclosures and creating spaces. • Joins construction pieces together to build and balance. • Realises tools can be used for a purpose.</p>	<p>using a variety of resources. • Uses simple tools and techniques competently and appropriately. • Selects appropriate resources and adapts work where necessary. • Selects tools and techniques needed to shape, assemble and join materials they are using.</p> <p>Early Learning Goal</p> <p>Children safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.</p>
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