

**Progression of Skills  
Design and Technology**

R	<p><b>Playing and exploring</b> Plan and think ahead about how they will explore or play with objects. Guide their own thinking and actions by talking to themselves while playing. Make independent choices. Do things independently that they have been previously taught.</p> <p><b>Active learning</b> Use a range of strategies to reach a goal they have set for themselves. Begin to correct their mistakes themselves. Keep on trying when things are difficult.</p> <p><b>Creating and thinking critically</b> Review their progress as they try to achieve a goal. Check how well they are doing. Solve real problems. Know more so feel confident about coming up with their own ideas. Make more links between those ideas.</p> <p><b>Communication and language</b> <b>3 – 4 years</b> Understand 'why' questions. Use talk to organise themselves and play.</p> <p><b>Reception</b> Ask questions to find out more and to check they understand what has been said to them. Articulate their ideas and thoughts in well-formed sentences. Use talk to help work out problems and organise thinking and activities, and to explain how things work and why they might happen.</p> <p><b>ELG: Speaking</b> Participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary. Offer explanations for why things might happen, making use of recently introduced vocabulary.</p> <p><b>Expressive arts and design</b> <b>3 – 4 years</b> Explore different materials freely, in order to develop their ideas about how to use them and what to make. Develop their own ideas and then decide which materials to use to express them. Join different materials.</p> <p><b>Reception</b> Create collaboratively, sharing ideas, resources and skills.</p>	<p><b>Personal, social and emotional development</b> <b>3-4 years</b> Select and use activities and resources, with help when needed. This helps them to achieve a goal they have chosen, or one which is suggested to them.</p> <p><b>Reception</b> Show resilience and perseverance in the face of challenge.</p> <p><b>ELG: Self-regulation</b> Set and work towards simple goals, being able to wait for what they want and control their immediate impulses when appropriate.</p> <p><b>ELG: Managing self</b> Be confident to try new activities and show independence, resilience and perseverance in the face of challenge.</p> <p><b>Physical development</b> <b>3 – 4 years</b> Choose the right resources to carry out their plan. Collaborate with others to manage large items. Use one-handed tools and equipment. Make healthy choices about food.</p> <p><b>Reception</b> Develop their small motor skills so that they can use a range of tools competently, safely and confidently. Know and talk about healthy eating.</p> <p><b>ELG: Fine motor skills</b> Use a range of small tools.</p> <p><b>Mathematics</b> <b>3 – 4 years</b> Make comparisons between objects relating to size, length, weight and capacity. Select shapes appropriately. Combine shapes to make new ones. Begin to describe a sequence of events using words such as 'first' and 'then'.</p> <p><b>Understanding of the world</b> <b>3 – 4 years</b> Explore how things work.</p>
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	<b>Developing, planning and communicating ideas</b>	<b>Working with tools, equipment, materials and components to make quality products</b>	<b>Evaluating processes and products</b>	<b>Cooking and Nutrition</b>
1/2	<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>Begin to understand the development of existing products: What they are for, how they work, materials used.</p> <p>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>Develop their ideas through talk and drawings and label parts.</p> <p>Make templates and mock ups of their ideas in card and paper or using ICT.</p>	<p>Select tools and materials; use correct vocabulary to name and describe them.</p> <p>Build structures, exploring how they can be made stronger, stiffer and more stable.</p> <p>With help measure, cut and score with some accuracy.</p> <p>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>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 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>Prepare simple dishes safely and hygienically, without using a heat source.</p> <p>Use techniques such as cutting, peeling and grating.</p>

<p>KS2</p>	<p>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.</p> <p>Consider the views of others, including intended users, to improve their work.</p> <p>Learn about inventors, designers, engineers, chefs and manufacturers who have developed ground-breaking products.</p> <p>Explain their choice of materials and components according to function and aesthetic.</p> <p>Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces - link with Mathematics and Science.</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> <p>Plan the order of their work, choosing appropriate materials, tools and techniques.</p> <p>Suggest alternative methods of making if the first attempts fail.</p> <p>Identify the strengths and areas for development in their ideas and products.</p> <p>Know how much products cost to make, how sustainable and innovative they are and the impact products have beyond their intended purpose.</p>	<p>Select a wider range of tools and techniques for making their product safely.</p> <p>Measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques, with more accuracy.</p> <p>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>Know how simple electrical circuits and components can be used to create functional products.</p> <p>Understand how more complex electrical circuits and components can be used to create functional products.</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>Select appropriate tools, materials, components and techniques and use them.</p> <p>Assemble components to make working models.</p> <p>Aim to make and to achieve a quality product.</p> <p>Construct products using permanent joining techniques.</p> <p>Use more complex electrical circuits and components to create functional products and program a computer to monitor changes in the environment and control their products.</p> <p>Reinforce and strengthen a 3D framework.</p> <p>Use finishing techniques to strengthen and improve the appearance of their product using a range of equipment including ICT.</p>	<p>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 which has helped shape the world.</p> <p>Evaluate their 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 task.</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>Prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source.</p> <p>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>Understand that seasons may affect the food available.</p> <p>Prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source.</p>
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