



## Overton Progression of Skills in Design Technology

Reception			
Design	Make	Evaluate	Technical Knowledge
<p><b>Mathematics: Shape, space and measure</b>  <b>Early Learning Goal</b>            Children use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems.</p> <p><b>Communication and Language: Understanding</b>  <b>Early Learning Goal</b>            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><b>Physical movement: moving and handling</b>            *Uses simple tools to effect changes to materials            *Handles tools, objects, construction and malleable materials safely and with increasing control.  <b>Understanding the world: Technology</b>  <b>Early Learning Goal</b> Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes.  <b>Early learning goal</b>            Children show good control and co-ordination in large and small movements. They move confidently in a range of ways, safely negotiating space. They handle equipment and tools effectively, including pencils for writing.  <b>Physical Development: Health and self-care</b>            *Practices some appropriate safety measures without direct supervision.  <b>Expressive arts and design: Exploring and using media and materials</b>  <b>Early learning goals</b>            They safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.</p>	<p><b>Mathematics: Shape, space and measure</b>  <i>Orders and sequences familiar events.</i></p> <p><b>Physical Development: Health and self-care</b>            Shows understanding of the need for safety when tackling new challenges, and considers and manages some risks.</p> <p><b>Understanding the world: The world</b>  <b>Early Learning Goal</b>            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, music, dance, role play and stories.</p>	<p><b>Physical Development: Health and self-care</b>            Shows some understanding that good practices with regard to exercise, eating, sleeping and hygiene can contribute to good health.  <b>Physical Development: Health and self-care</b>  <b>Early Learning Goal</b>            Children know the importance for good health of a healthy diet, and talk about ways to keep healthy and safe.</p> <p><b>Understanding the world: The world</b>  <b>Early Learning Goal</b>            Children know about similarities and differences in relation to places, objects, materials and living things. They talk about the features of their own immediate environment and how environments might vary from one another.</p>



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	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
Design	<ul style="list-style-type: none"> <li>• Draw on their own experience to help generate ideas.</li> <li>• Suggest ideas and explain what they are going to do using words and pictures.</li> <li>• Communicate ideas through talking, drawing and templates.</li> <li>• Identify a target group for what they intend to design and make.</li> <li>• Model their ideas in card and paper.</li> <li>• Develop their design ideas applying findings from their earlier research</li> <li>• Learn and use keys words for a topic.</li> </ul>	<ul style="list-style-type: none"> <li>• Generate ideas by drawing on their own and other people's experiences</li> <li>• Identify a purpose for what they intend to design and make.</li> <li>• Use their own experiences to help them design a purposeful and appealing product for themselves and others based on a criterion.</li> <li>• Generate and develop their ideas through mock ups and where appropriate, information technology.</li> <li>• Develop their design ideas through discussion, observation, drawing and modelling</li> <li>• Design a product using a design specification or criteria.</li> <li>• Make simple drawings and annotate their design.</li> <li>• Use appropriate vocabulary to explain what I need to do and use.</li> </ul>	<ul style="list-style-type: none"> <li>• Generate ideas for an item, considering its purpose and the user/s</li> <li>• Use their own experiences to help them design a purposeful and appealing product for themselves and others based on a criterion.</li> <li>• Design a product using a design specification or criteria.</li> <li>• Plan the order of their work before starting.</li> <li>• List things their design needs to do in a specification</li> <li>• Explore, develop and communicate design proposals by modelling ideas.</li> <li>• Make drawings with labels when designing.</li> <li>• Explain and annotate their designs.</li> <li>• Use appropriate vocabulary to explain what they need to do and use.</li> </ul>	<ul style="list-style-type: none"> <li>• Generate ideas, considering the purposes for which they are designing</li> <li>• Use their own experiences to help them design a purposeful and appealing product for themselves and others based on a criterion</li> <li>• Make labelled drawings from different views showing specific features</li> <li>• 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</li> <li>• Create a realistic plan and specify some of the limitations when designing, eg. Time and cost.</li> <li>• Gather and use research to help them design.</li> <li>• Use appropriate vocabulary to explain what they need to do and use.</li> </ul>	<ul style="list-style-type: none"> <li>• Generate ideas through brainstorming and identify a purpose for their product</li> <li>• To use their own experiences to help them design a purposeful and appealing product for themselves and others based on a criterion.</li> <li>• Gather and use research to help them design and think about who will use their design to include their opinions/needs.</li> <li>• Use results of investigations, information sources, including ICT when developing design ideas</li> <li>• Draw up a specification for their design</li> <li>• 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 .</li> <li>• Work from their own</li> </ul>	<ul style="list-style-type: none"> <li>• Use their own experiences to help them design a purposeful and appealing product for themselves and others based on a criterion.</li> <li>• Look at and evaluate existing products to show they understand their form and function.</li> <li>• Communicate their ideas through detailed labelled drawings</li> <li>• Develop a design specification</li> <li>• Explore, develop and communicate aspects of their design proposals by modelling their ideas in a variety of ways</li> <li>• Plan the order of their work, choosing appropriate materials, tools and techniques</li> <li>• Evaluate how effectively they have used their sources of information.</li> </ul>

				<ul style="list-style-type: none"> <li>Evaluate products and identify criteria that can be used for their own design</li> </ul>	<ul style="list-style-type: none"> <li>detailed plan and change it when needed.</li> <li>Evaluate and develop their ideas by annotating.</li> </ul>	
Make	<ul style="list-style-type: none"> <li>Make their design using appropriate techniques</li> <li>With help measure, mark out, cut and shape a range of materials</li> <li>Use the appropriate tool to perform a task eg scissors and a hole punch safely</li> <li>Assemble, join and combine materials and components together using a variety of temporary methods e.g. glues or masking tape</li> <li>Select and use appropriate fruit and vegetables, processes and tools</li> <li>Use basic food handling, hygienic practices and personal hygiene</li> <li>Use simple finishing techniques to improve the appearance of their product</li> </ul>	<ul style="list-style-type: none"> <li>Begin to select tools and materials; use vocab' to name and describe them</li> <li>Select from a range of tools and equipment to perform practical tasks [for</li> <li>example, cutting, shaping, joining and finishing</li> <li>Measure, cut and score with some accuracy</li> <li>Use hand tools safely and appropriately</li> <li>Use a range of materials according to their characteristics against my design criteria.</li> <li>Assemble, join and combine materials in order to make a product</li> <li>Cut, shape and join fabric to make a simple garment. Use basic sewing techniques</li> <li>Follow safe procedures for food safety and hygiene</li> <li>Choose and use appropriate finishing techniques</li> </ul>	<ul style="list-style-type: none"> <li>Select tools and techniques for making their product</li> <li>Choose what tools/materials/techniques to use and use them with some accuracy.</li> <li>Measure, mark out, cut, score and assemble components with more accuracy</li> <li>Work safely and accurately with a range of simple tools</li> <li>Think about their ideas as they make progress and be willing change things if this helps them improve their work</li> <li>Measure, tape or pin, cut and join fabric with some accuracy</li> <li>Demonstrate hygienic food preparation and storage</li> <li>Use finishing techniques strengthen and improve the appearance of their product using a range of equipment including ICT</li> </ul>	<ul style="list-style-type: none"> <li>Select appropriate tools and techniques for making their product</li> <li>Measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques</li> <li>Join and combine materials and components accurately in temporary and permanent ways</li> <li>Sew using a range of different stitches, weave and knit</li> <li>Measure, tape or pin, cut and join fabric with some accuracy</li> <li>Use simple graphical communication techniques</li> <li>Make my product work well (function).</li> <li>select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities</li> </ul>	<ul style="list-style-type: none"> <li>Select appropriate materials, tools and techniques</li> <li>Measure and mark out accurately</li> <li>Use skills in using different tools and equipment safely and accurately</li> <li>Pin, sew and stitch materials together create a product</li> <li>Weigh and measure accurately (time, dry ingredients, liquids)</li> <li>Apply the rules for basic food hygiene and other safe practices e.g. hazards relating to the use of ovens</li> <li>Cut and join with accuracy to ensure a good-quality finish to the product</li> <li>select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities</li> </ul>	<ul style="list-style-type: none"> <li>Select appropriate tools, materials, components and techniques</li> <li>Use a variety of materials/components with some accuracy</li> <li>Assemble components make working models</li> <li>Work with a range of tools, materials and equipment with some precision.</li> <li>Test and evaluate my work, comparing it to my design specification (spec.)</li> <li>Use tools safely and accurately</li> <li>Construct products using permanent joining techniques</li> <li>Make modifications as they go along</li> <li>Achieve a quality product</li> </ul>
Evaluate	<ul style="list-style-type: none"> <li>Evaluate their product by discussing how well it</li> </ul>	<ul style="list-style-type: none"> <li>Explore and evaluate a range of existing products.</li> </ul>	<ul style="list-style-type: none"> <li>Evaluate their product against original design criteria e.g. how well it</li> </ul>	<ul style="list-style-type: none"> <li>Evaluate their products carrying out appropriate tests</li> </ul>	<ul style="list-style-type: none"> <li>Evaluate a product against the original design specification</li> </ul>	<ul style="list-style-type: none"> <li>Evaluate their products, identifying strengths and areas</li> </ul>

	<p>works in relation to the purpose</p> <ul style="list-style-type: none"> <li>• Evaluate their products as they are developed, identifying strengths and possible changes they might make</li> <li>• Evaluate their product by asking questions about what they have made and how they have gone about it</li> <li>• Talk about my work and what I did to other people.</li> <li>• Use the keywords they have learnt to describe what they did and how they did it (I use scissors to cut, I used split pins to join).</li> <li>• Evaluate their design, and how well they worked, to say what they changed and improved as they went along.</li> </ul>	<ul style="list-style-type: none"> <li>• Children discuss their own products, what worked well and what can be improved for next time.</li> <li>• Children comment on the products made by their peers.</li> <li>• Evaluate their products as they are developed, identifying strengths and possible changes they might make</li> <li>• Specify who will use their design and consider their needs/opinions</li> <li>• Children evaluate their ideas and finished products against the design criteria.</li> </ul>	<p>meets its intended purpose</p> <ul style="list-style-type: none"> <li>• Disassemble and evaluate familiar products</li> <li>• Plan what to do next.</li> <li>• Think ahead about how to make their design and in what order.</li> <li>• Evaluate their design, and how well they worked, to say what they changed and improved as they went along.</li> <li>• Talk about their ideas, saying what they like and dislike about them</li> </ul>	<ul style="list-style-type: none"> <li>• Evaluate their work both during and at the end of the assignment</li> <li>• Evaluate their design, and how well they worked, to say what they changed and improved as they went along.</li> </ul>	<ul style="list-style-type: none"> <li>• Check and measure their work as it develop and correct errors.</li> <li>• Evaluate it personally and seek evaluation from others</li> </ul>	<p>for development, and carrying out appropriate tests</p> <ul style="list-style-type: none"> <li>• Record their evaluations using drawings with labels</li> <li>• Evaluate against their original criteria and suggest ways that their product could be improved</li> </ul>
Technical Knowledge	<ul style="list-style-type: none"> <li>• Use the basic principles of a healthy and varied diet to prepare dishes</li> <li>• Understand where food comes from.</li> <li>• Can describe how things work.</li> <li>• Describe products they know about which are like their design.</li> <li>• Choose what tools/material/technique to use and use with some accuracy.</li> </ul>	<ul style="list-style-type: none"> <li>• Use the basic principles of a healthy and varied diet to prepare dishes</li> <li>• Understand where food comes from.</li> <li>• Use key vocabulary when discussing their design and in the process of making.</li> <li>• build structures, exploring how they can be made stronger, stiffer and more stable</li> </ul>	<ul style="list-style-type: none"> <li>• Apply their understanding of how to strengthen, stiffen and reinforce more complex structures</li> </ul>	<ul style="list-style-type: none"> <li>• Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.</li> <li>• Pay attention to quality of finish when making.</li> <li>• understand and use electrical systems in my products [for example, series circuits incorporating switches, bulbs, buzzers and motors</li> <li>• Apply my understanding of computing to program, monitor and control their products.</li> </ul>	<ul style="list-style-type: none"> <li>• Work with a range of tools, materials and equipment with some precision.</li> <li>• Pay attention to quality of finish when making.</li> <li>• Test and evaluate their work, comparing it to their design specification (spec.</li> <li>• Apply my understanding of computing to program, monitor and control their products.</li> <li>• Understand and use mechanical systems in my products [for example, gears, pulleys, cams, levers and linkages]</li> </ul>	<ul style="list-style-type: none"> <li>• I identify ways of improving my finished products.</li> <li>• With a range of equipment showing that they understand their working characteristics.</li> <li>• Apply their understanding of computing to program, monitor and control their products.</li> <li>• understand and use electrical systems in my products [for example, series circuits incorporating switches, bulbs, buzzers and mot</li> <li>• Understand and use mechanical systems in my products [for example, , cams,</li> </ul>