



**Progression of Skills and Knowledge for DT**

**Developing, Planning and communicating ideas**

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<ul style="list-style-type: none"> <li>-Explain what they are making</li> <li>-Shows two-channelled attention – can listen and do for a short amount of time.</li> <li>- Responds to instructions involving a two-part sequence.</li> <li>- Listens and responds to ideas expressed by others in conversation or discussion.</li> <li>-Uses talk to organise, sequence and clarify thinking, ideas, feelings and events.</li> </ul>	<ul style="list-style-type: none"> <li>-Follow verbal instructions</li> <li>-Explain what they are making and which materials they are using</li> <li>-Name the tools they are using</li> <li>-Describe what they need to do next</li> <li>-Select materials from a limited range that will meet the design criteria</li> <li>-Explore ideas by rearranging materials</li> <li>-Model ideas with kits, reclaimed materials</li> <li>-Select pictures to help develop ideas</li> </ul>	<ul style="list-style-type: none"> <li>-Select appropriate technique explaining First.....Next.....Last....</li> <li>-Select and name the tools needed to work the materials</li> <li>-Use pictures and words to convey what they want to design and make</li> <li>-Describe their models and drawings of ideas and intentions</li> <li>-Use kits/reclaimed materials to develop an idea</li> <li>-Discuss their work as it progresses</li> <li>-Add notes to drawings to help explanations</li> </ul>	<ul style="list-style-type: none"> <li>-Investigate similar products to the one to be made to give starting points for a design</li> <li>-Draw/sketch products to help analyse and understand how products are made</li> <li>-Plan a sequence of actions to make a product</li> <li>-Record the plan by drawing (labelled sketches) or writing</li> </ul>	<ul style="list-style-type: none"> <li>-Think ahead about the order of their work and decide upon tools and materials</li> <li>-Develop more than one design or adaptation of an initial design</li> <li>-Propose realistic suggestions as to how they can achieve their design ideas</li> </ul>	<ul style="list-style-type: none"> <li>- Investigate products/images to collect ideas</li> <li>-Sketch and model alternative ideas</li> <li>-Develop one idea in depth</li> <li>-Combine modelling and drawing to refine ideas</li> <li>-Plan the sequence of work using a storyboard</li> <li>-Record ideas using annotated diagrams</li> <li>-Use a computer to model ideas</li> </ul>	<ul style="list-style-type: none"> <li>-Use models, kits and drawings to help formulate design ideas</li> <li>-Make prototypes</li> <li>-Use found information to inform decisions</li> <li>-Draw plans which can be read/followed by someone else</li> <li>-Give a report using correct technical vocabulary</li> </ul>



	-Use drawings to record ideas as they are developed					
<b>Related National Curriculum Objectives in italics:</b>	<i>Design - design purposeful, functional, appealing products for themselves and other users based on design criteria</i> <i>-generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology</i>	<i>Design - use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups</i> <i>-generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design</i>				

**Food**

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p><b>Peel</b> hand, e.g. satsuma, banana</p> <p><b>Mix/stir</b> - to loosely combine Ingredients</p> <p><b>Spoon</b> - ingredients between containers</p> <p><b>Measure</b> - using a spoon, e.g. flour, dried fruit - count ingredients e.g. peas</p> <p><b>Cut</b> - soft foods with butter knife, e.g. banana, strawberries -Shows increasing control over an objects including pushing and pulling it.</p>	<p><b>Peel</b> - with a swivel peeler with adult support</p> <p><b>Spread</b> - soft ingredients, e.g. jam</p> <p><b>Snip</b> - fresh herbs, spring onions</p> <p><b>Grate</b> - soft foods, e.g. cheese, cucumber</p> <p><b>Cut</b> - low resistance foods with a table knife in to equal size pieces/slices, e.g. canned pineapple slices, sticks of pepper, mushrooms - use a fork to secure foods</p>	<p><b>Peel</b> - with a swivel peeler with adult support</p> <p><b>Juice</b> - using a juicer to extract juice, e.g. orange</p> <p><b>Measure</b> - using different size measuring spoons, e.g. Liquids - refer to ingredients in simple fractions, e.g. half, quarter</p> <p><b>Thread</b> - thread soft foods onto cocktail sticks, e.g. fruit kebab – strawberries, satsuma segments</p> <p><b>Cut</b> - low resistance foods with a table knife in</p>	<p><b>Peel</b> - with a swivel peeler with supervision</p> <p><b>Spread</b> - ingredients evenly over another food</p> <p><b>Grate</b> - firmer foods, e.g. carrots, apples</p> <p><b>Snip</b> - with greater dexterity and control, e.g. to shred lettuce or cabbage leaves for salad</p> <p><b>Cut out</b> - placing the cutter in positions to make good of the material available and avoid waste</p> <p><b>Cut</b></p>	<p><b>Press</b> - using a garlic press</p> <p><b>Peel</b> - with a swivel peeler with supervision</p> <p><b>Mix/stir</b> - any ingredients thoroughly - whisk foods using a hand whisk</p> <p><b>Spoon</b> - be able to use two spoons to transfer ingredients into different size/shape containers with minimal spillage</p> <p><b>Measure</b> - using measuring jug &amp; <b>digital or analogue scales</b> with support to obtain accuracy</p> <p><b>Grate</b></p>	<p><b>Mix/stir</b> - fold ingredients together carefully</p> <p><b>Spoon</b> - be able to gauge the quantities spooned to ensure an equal amount of ingredient in each container</p> <p><b>Measure</b> - using a measuring jug independently and accurately - using digital or analogue scales accurately and independently</p> <p><b>Grate</b> - using the zesting part of a grater, e.g. lemon, orange - use a nutmeg grater</p>	<p><b>Peel</b> - with a swivel peel to create food ribbons to be used in a dish, e.g. courgette/carrot ribbons with supervision</p> <p><b>Measure</b> - using a measuring jug independently and accurately - using digital and analogue scales accurately and independently</p> <p><b>Grate</b> - using the zesting part of a grater, e.g. lemon, orange - use a nutmeg grater</p> <p><b>Thread</b></p>



<p>-Children show good control and co-ordination in large and small movements.</p>		<p>to equal size pieces/slices, e.g. canned pineapple slices, sticks of pepper, mushrooms - use a fork to secure foods</p>	<p>- medium resistance foods with a vegetable knife, e.g. cucumber. - use a fork or the claw grip to secure foods - medium resistant or partly prepared foods using a <b>bridge</b> hold, e.g. cut half a tomato into a quarter, halve large grapes <b>Shape and mould</b> - to create visually appealing products e.g. mini cottage loaf or plait, wrap</p>	<p>- firmer foods, e.g. carrots, apples <b>Snip</b> - with greater dexterity &amp; control, e.g. shred lettuce or cabbage leaves <b>Cut</b> - higher resistance food with a vegetable knife, using the claw grip, e.g. celery, carrots - higher resistant foods from whole using the bridge hold, e.g. halve an apple, raw potato</p>		<p>- higher resistance foods onto kebab sticks, e.g. peppers, onions <b>Cut</b> - higher resistance food with a vegetable knife, using the claw grip, e.g. celery, carrots - higher resistant foods from whole using the bridge hold, e.g. halve an apple, raw potato</p>
<p><b>Related National Curriculum Objectives in italics:</b></p>	<p><i>- use the basic principles of a healthy and varied diet to prepare dishes -understand where food comes from.</i></p>		<p><i>- understand and apply the principles of a healthy and varied diet -prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques - understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.</i></p>			
<p><b>Textiles</b></p>						
<p><b>EYFS</b></p>	<p><b>Year 1</b></p>	<p><b>Year 2</b></p>	<p><b>Year 3</b></p>	<p><b>Year 4</b></p>	<p><b>Year 5</b></p>	<p><b>Year 6</b></p>
<p>- Children know about similarities and differences in relation to objects and materials. - Experiments to create different textures.</p>	<p>- Colour fabrics using a range of techniques e.g. fabric paints, printing, painting -Cut out shapes which have been created by drawing round a template onto the</p>	<p>- Join fabrics by using glue, staples or tape -Decorate fabrics with buttons, beads, sequins, braids, ribbons</p>	<p>- Join fabrics using running stitch, over sewing, back stitch - Explore fastenings and recreate some e.g. sew on buttons and make loops -Use appropriate decoration</p>		<p>-Create 3D products using pattern pieces and seam allowance -Understand pattern layout -Decorate textiles appropriately often before joining components</p>	



<ul style="list-style-type: none"> <li>- Manipulates materials to achieve a planned effect.</li> <li>-Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.</li> </ul>	fabric		<ul style="list-style-type: none"> <li>techniques e.g. appliqué (glued or simple stitches)</li> <li>-Create a simple pattern</li> <li>-Understand the need for patterns</li> </ul>		<ul style="list-style-type: none"> <li>-Pin and tack fabric pieces together</li> <li>- Join fabrics using over sewing, back stitch or blanket stitch</li> <li>- Combine fabrics to create more useful properties</li> <li>-Make quality products</li> </ul>	
<p><b>Related National Curriculum Objectives in italics:</b></p>	<p><i><b>Make</b> -select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]</i></p> <p><i>- select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics</i></p>		<p><i><b>Make</b> - select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately</i></p> <p><i>-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</i></p>			
<b>Construction</b>						
<b>EYFS</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Year 6</b>
<ul style="list-style-type: none"> <li>-Uses simple tools to effect changes to materials.</li> <li>-Handles tools, construction and malleable materials safely and with increasing control.</li> </ul>	<ul style="list-style-type: none"> <li>-Make vehicles with construction kits which contain free running wheels</li> <li>- Use a range of materials to create models with wheels and axles e.g. tubes, dowel, cotton reels</li> <li>- Attach wheels to a chassis using an axle</li> </ul>	<ul style="list-style-type: none"> <li>-Join appropriately for different materials and situations e.g. glue, tape,</li> <li>-Mark out materials to be cut using a template</li> <li>-With an adult use a glue gun.</li> </ul>	<ul style="list-style-type: none"> <li>Make structures more stable by giving them a wide base</li> <li>-Prototype frame structures</li> <li>-Measure and mark square selection, strip and dowel accordingly to 1cm</li> <li>-Use glue gun with close supervision (one to one)</li> </ul>	<ul style="list-style-type: none"> <li>-Incorporate a circuit with a bulb or buzzer into a model</li> <li>-Create shell or frame structures, strengthen frames with diagonal struts</li> </ul>	<ul style="list-style-type: none"> <li>- Use bradawl to mark hole positions</li> <li>-Cut strip wood, dowel, square section wood accurately to 1mm</li> <li>- Join materials using appropriate methods</li> <li>-Incorporate motor and a switch into a model</li> <li>-Control a model using a simple control programme</li> </ul>	<ul style="list-style-type: none"> <li>-Control a model using an ICT control programme</li> <li>-Build frameworks using a range of materials e.g. wood, card corrugated plastic to support mechanisms</li> <li>- Use glue gun with close supervision</li> <li>-Use a basic CAM mechanism to design a moving toy.</li> </ul>



<p><b>Related National Curriculum Objectives in italics:</b></p>	<p><b>Make</b> -select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]          -select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics  <b>Technical knowledge</b> - build structures, exploring how they can be made stronger, stiffer and more stable          -explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.</p>	<p><b>Make</b> -select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately          - 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  <b>Technical knowledge</b> -apply their understanding of how to strengthen, stiffen and reinforce more complex structures          -understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]          - understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]          - apply their understanding of computing to program, monitor and control their products.</p>
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**Sheet Materials**

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p>- Uses simple tools to effect changes to materials.            -Handles tools, construction and malleable materials safely and with increasing control.</p>	<p>-Fold, tear and cut paper and card            -Roll paper to create tubes            -Cut along lines, straight and curved            -Curl paper            - Use hole punch</p>	<p>- Insert paper fasteners for card linkages            -Use lolly sticks/card to make levers and linkages            -Create hinges            -Investigate strengthening sheet materials            -Investigate joinings temporary, fixed and moving</p>	<p>-Cut slots            -Cut internal shapes</p>	<p>- Use linkages to make movement larger or more varied.            -Use and explore complex pop ups</p>	<p>-Cut slots            -Cut accurately and safely to a marked line            -Join and combing materials with temporary, fixed or moving joints.</p>	<p>-Use craft knife, cutting mat and safety ruler under one to one supervision if appropriate            -Choose an appropriate sheet material for the purpose            -Create nets</p>
<p><b>Related National Curriculum Objectives in italics:</b></p>	<p><b>Make</b> -select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]          - select from and use a wide range of materials and components, including</p>	<p><b>Make</b> -select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately          -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  <b>Technical knowledge</b> -apply their understanding of how to strengthen, stiffen and reinforce more complex structures</p>				



	<p>construction materials, textiles and ingredients, according to their characteristics</p> <p><b>Technical knowledge</b> - build structures, exploring how they can be made stronger, stiffer and more stable</p> <p>-explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.</p>		<p>-understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]</p>			
<b>Evaluating</b>						
<b>EYFS</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Year 6</b>
<p>- achieving what they set out to achieve.</p> <p>-Show satisfaction in meeting their own goals.</p> <p>-Being proud of how they accomplished something – not just the end results.</p> <p>-Enjoy meeting challenges for their own sake rather than external rewards or praise.</p>	<p>-Say what they like and do not like about items they have made and attempt to say why</p> <p>-Talk about changes made during the making process</p> <p>-Discuss how closely their finished products meet their design criteria</p>	<p>-Explore what existing products are/what for/how they work/how they are used/materials used/likes and dislikes about a product</p> <p>-Talk about their designs as they develop and identify good and bad points</p>	<p>- Identify the strengths and weaknesses of their design ideas</p> <p>-Decide which design idea to develop</p> <p>-Consider and explain how the finished product could be improved</p>	<p>-Discuss how well the finished product meets the design criteria and how well it meets the needs of the user.</p>	<p>-Use the design criteria to inform their decisions about ways to proceed</p> <p>- Justify their decisions about materials and methods of construction</p> <p>- Make suggestions as how their design could be improved</p>	<p>- Identify what does and does not work in the product and suggest improvements.</p> <p>-Reflect on their work using design criteria stating how well the design fits the needs of the user</p>
<p><b>Related National Curriculum Objectives in italics:</b></p>	<p><b>Evaluate</b> - explore and evaluate a range of existing products</p> <p>-evaluate their ideas and products against design criteria</p>		<p><b>Evaluate</b> -investigate and analyse a range of existing products</p> <p>-evaluate their ideas and products against their own design criteria and consider the views of others to improve their work</p> <p>- understand how key events and individuals in design and technology have helped shape the world</p>			