



### Progression in Design and Technology

Phase	Strand:	Key vocab	Key skills/ skills
EYFS	Food Technology	<ul style="list-style-type: none"> <li>• Fruit and vegetables names, names of equipment and utensils</li> <li>• Sensory vocabulary e.g. crunchy, smooth, soft, hard, sticky, sharp, sour, crisp, juicy, sweet</li> </ul>	<ul style="list-style-type: none"> <li>• Understand that equipment and tools have to be used safely (30-50 months).</li> <li>• Show understanding of the need for safety when tackling new challenges and consider and manage some risks (40-60 months).</li> <li>• Practise some appropriate safety measures without direct superviso (40-60 months).</li> <li>• Handle equipment and tools effectively (ELG).</li> </ul>
KS1		<ul style="list-style-type: none"> <li>• fruit</li> <li>• vegetables</li> <li>• flesh, skin, seed, pip, core</li> <li>• Sensory evaluation: appearance, smell, taste, texture</li> <li>• Utensils: juicer, peeler, knife</li> <li>• Food processing: peeling, chopping, grating, squeezing</li> <li>• Eatwell plate</li> <li>• farming</li> <li>• healthy diet</li> <li>• ingredients</li> <li>• design</li> <li>• plan</li> <li>• evaluate</li> </ul>	<ul style="list-style-type: none"> <li>• Cut food safely.</li> <li>• Weigh ingredients to use a recipe.</li> <li>• Describe ingredient used when making a dish.</li> </ul>
LKS2		<ul style="list-style-type: none"> <li>• Ingredients</li> <li>• Eatwell plate: carbohydrates, dairy, fat, sugar, protein, fruit/vegetables</li> <li>• Food Processing: chopping, dicing, peeling, mixing</li> <li>• grown</li> <li>• reared</li> <li>• caught</li> </ul>	<ul style="list-style-type: none"> <li>• Describe how food ingredients come together.</li> <li>• Weigh out ingredients and follow a given recipe to create a dish.</li> <li>• Talk about which foods are healthy and which foods are not.</li> <li>• Know when food is ready for harvesting.</li> <li>• Know how to be both hygienic and safe when using food.</li> <li>• Bring a creative element to the food products being designed.</li> </ul>
UKS2		<ul style="list-style-type: none"> <li>• dough</li> <li>• yeast</li> <li>• gluten</li> <li>• benching</li> <li>• proof/proofing</li> <li>• fermentation</li> <li>• processed food</li> <li>• nutrients</li> <li>• seasonality</li> <li>• food hygiene</li> <li>• Food Processing: peeling chopping, slicing, grating, mixing, kneading, baking</li> </ul>	<ul style="list-style-type: none"> <li>• Make imaginative use of knowledge that they have acquired of tools, techniques and materials.</li> <li>• Know how to prepare a meal by collecting the ingredients in the first place.</li> <li>• Work within a budget to create a meal.</li> <li>• Understand the difference between a savoury and sweet dish.</li> <li>• Be both hygienic and safe in the kitchen.</li> <li>• Know which seasons various foods are available for harvesting.</li> <li>• Explain how food and ingredients should be stored and give reasons.</li> </ul>



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EYFS	Mechanisms	<ul style="list-style-type: none"> <li>Name of resources: card, masking tape, paper, sellotape, glue</li> <li>pull, push, up, down, straight, curve, forwards, backwards</li> </ul>	<ul style="list-style-type: none"> <li>Handle tools, objects, construction and malleable materials safely and with increasing control (40-60 months).</li> <li>Children safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function (ELG).</li> </ul>
KS1		<ul style="list-style-type: none"> <li>Mechanism parts: slider, lever, pivot, slot, bridge/guide, wheel, axle, axle holder, chassis, body, cab</li> <li>fastener</li> <li>join</li> <li>design</li> <li>make</li> <li>evaluate</li> <li>finishing</li> <li>user</li> <li>purpose,</li> <li>design criteria</li> <li>product function</li> </ul>	<ul style="list-style-type: none"> <li>Use own ideas to make something.</li> <li>Make a product that moves.</li> <li>Describe how something works.</li> <li>Measure materials to use in a model or structure.</li> <li>Explain to someone else how they want to make their products and make a simple plan before making.</li> <li>Explain what works well and not so well in the model they have made.</li> <li>Join materials and components in different ways.</li> <li>Use wheels and axles, when appropriate to do so.</li> </ul>
LKS2		<ul style="list-style-type: none"> <li>Mechanism parts: lever, linkage, pivot, slot, bridge, guide</li> <li>system, input, process, output</li> <li>linear</li> <li>rotary</li> <li>oscillating</li> <li>reciprocating</li> <li>function</li> <li>prototype</li> <li>innovative</li> <li>appealing</li> <li>design brief</li> </ul>	<ul style="list-style-type: none"> <li>Follow a step-by-step plan, choosing the right equipment and materials.</li> <li>Know why a model has, or has not been successful.</li> <li>Persevere and adapt work when original ideas do not work.</li> <li>Evaluate and suggest improvement for design.</li> <li>Present a product in an interest way.</li> </ul>
UKS2		<ul style="list-style-type: none"> <li>Mechanism parts: pulley, drive belt, gear, rotation, spindle, driver, follower, ratio, transmit, axle, motor circuit, switch</li> <li>circuit diagram</li> <li>annotated drawings</li> <li>exploded diagrams</li> <li>mechanical system electrical system</li> <li>input</li> <li>process</li> <li>output</li> <li>design decisions functionality</li> <li>authentic</li> <li>design specification</li> </ul>	<ul style="list-style-type: none"> <li>Design and make a product that requires pulleys or gears.</li> <li>Suggest alternative plans; outlining the positive features and draw backs.</li> <li>Use knowledge to improve a made product by strengthening, stiffening or reinforcing.</li> <li>Know which IT product would further enhance a specific product.</li> </ul>



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EYFS	Structures	<ul style="list-style-type: none"> <li>• Skills: cut, fold</li> <li>• Names of materials: metal, wood, plastic</li> <li>• Names of shapes: circle, triangle, rectangle, square</li> </ul>	<ul style="list-style-type: none"> <li>• Beginning to be interested in and describe the texture of things (30-50 months).</li> <li>• Understands that different media can be combined to create new effects (40-60 months).</li> <li>• Manipulates materials to achieve a planned effect (40-60 months).</li> <li>• Use simple tools to effect changes to materials (40-60 months).</li> <li>• Handle tools, objects, construction and malleable materials safely and with increasing control (40-60 months).</li> <li>• Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function (ELG).</li> </ul>
KS1		<ul style="list-style-type: none"> <li>• Skills: join, fix</li> <li>• Structure: wall, tower, framework, weak, strong, base, top, underneath, side, edge, surface, thicker, thinner, corner, point, straight, curved,</li> <li>• Names of shapes: cuboid, cube, cylinder</li> <li>• design, make, evaluate,</li> <li>• user, purpose, ideas, design criteria</li> <li>• product, function</li> </ul>	<ul style="list-style-type: none"> <li>• Know how to make their own models stronger.</li> <li>• Can select appropriate resources and tools.</li> <li>• Joins materials and components in different ways.</li> <li>• Makes a model stronger or more stable.</li> </ul>
LKS2		<ul style="list-style-type: none"> <li>• Skills: marking out, scoring, shaping</li> <li>• shell structure</li> <li>• three dimensional</li> <li>• shape</li> <li>• net</li> <li>• Shape properties: vertex, edge, face</li> <li>• breadth</li> <li>• capacity</li> <li>• length</li> <li>• width</li> <li>• tabs</li> <li>• adhesives</li> <li>• assemble</li> <li>• stiff, strong,</li> <li>• reuse, recycle</li> <li>• hinge</li> <li>• sliding</li> </ul>	<ul style="list-style-type: none"> <li>• Choose a material for both its suitability and its appearance.</li> <li>• Select the most appropriate tools and techniques for a given task.</li> <li>• Work accurately to measure, make cuts and make holes.</li> <li>• Know how to strengthen a product by stiffening a given part or reinforce a part of the structure.</li> <li>• Know which material is likely to give the best outcome.</li> </ul>
UKS2		<ul style="list-style-type: none"> <li>• frame structure</li> <li>• stiffen, strengthen, reinforce</li> <li>• stability</li> <li>• temporary</li> <li>• permanent</li> <li>• design proposal</li> <li>• disassembly</li> <li>• annotated drawings</li> <li>• exploded diagrams</li> <li>• design brief</li> <li>• design specification</li> <li>• prototype</li> <li>• research</li> <li>• functional</li> </ul>	<ul style="list-style-type: none"> <li>• Use knowledge to improve a made product by strengthening, stiffening or reinforcing.</li> <li>• Suggest alternative plans; outlining the positive features and draw backs.</li> <li>• Use tools and equipment competently, knowing which tools to use for a specific practical task.</li> <li>• Know which IT product would further enhance a specific product.</li> </ul>



Phase	Strand:	Key vocab	Key skills/ skills
EYFS	Textiles	<ul style="list-style-type: none"> <li>Names of fabrics: cotton, wool, thread, string, cotton wool, faux fur</li> <li>Skills: cutting, sticking, weaving</li> </ul>	<ul style="list-style-type: none"> <li>Beginning to be interested in and describe the texture of things (30-50 months).</li> <li>Realise tools can be used for a purpose (30-50 months).</li> <li>Experiment to create different textures (40-60 months).</li> <li>Construct with purpose in mind, using a variety of resources (40-60 months).</li> <li>Select appropriate resources and adapt work where necessary (40-60 months).</li> <li>Children safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function (ELG).</li> </ul>
KS1		<ul style="list-style-type: none"> <li>Skills: cut, roll, coil, join</li> <li>pattern</li> <li>Types of puppet: glove, finger, string, sock puppet</li> <li>template</li> <li>decorate</li> <li>finish</li> <li>glue</li> <li>sewing</li> <li>staples</li> <li>velcro</li> <li>features</li> <li>suitable</li> <li>quality</li> <li>function</li> </ul>	<ul style="list-style-type: none"> <li>Use own ideas and design something and describe how their own idea works.</li> <li>Use own ideas to make something.</li> <li>Explain why they have chosen specific textiles.</li> <li>Explain what went well in their work.</li> </ul>
LKS2		<ul style="list-style-type: none"> <li>Textile fastenings: button, toggle, zip, Velcro, press studs, hook and eye</li> <li>Fabrics: linen, silk, wool, polyester, satin, polycotton, nylon,</li> <li>tie-dye</li> <li>batik</li> <li>Stitches: running stitch, back stitch, overstitch</li> <li>purpose</li> <li>design</li> <li>evaluate</li> <li>prototype</li> <li>annotated sketch</li> <li>functional</li> <li>aesthetics</li> </ul>	<ul style="list-style-type: none"> <li>Prove that a design meets a set criterion.</li> <li>Design a product and make sure that it is attractive.</li> <li>Use ideas from other people when designing.</li> <li>Know how to compare the work of different artists.</li> <li>Evaluate products for both their purpose and appearance.</li> <li>Explain how the original design has been improved.</li> </ul>
UKS2		<ul style="list-style-type: none"> <li>Fabrics: felt, cotton, wool, natural, man-made</li> <li>Seam</li> <li>seam allowance</li> <li>template</li> <li>pattern</li> <li>decoration</li> <li>embroidery</li> <li>Stiches: running stitch, blanket stitch, over-stich</li> <li>Knot</li> <li>Measuring</li> <li>Resist</li> <li>Adhesive</li> <li>iron transfer paper</li> <li>design criteria</li> <li>annotate</li> <li>design decisions</li> <li>functionality</li> <li>purpose</li> <li>mock-up</li> </ul>	<ul style="list-style-type: none"> <li>Come up with a range of ideas after collecting information from different sources.</li> <li>Use plaiting, pining, stitching and sewing techniques with care to decorate an image or artefact.</li> <li>Control simple stitches to produce a pattern with care and some accuracy.</li> <li>Make a prototype before making a final version.</li> </ul>



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LKS2	Electrical Systems and Computer Programming	<ul style="list-style-type: none"><li>• series circuit</li><li>• fault</li><li>• connection,</li><li>• Switches: toggle switch, push-to-make switch, push-to-break switch</li><li>• Equipment: battery, battery holder, bulb, bulb holder, wire insulator, crocodile clip</li><li>• conductor</li><li>• control</li><li>• program</li><li>• system</li><li>• input device</li><li>• output device</li><li>• user</li><li>• purpose</li><li>• function</li><li>• design criteria</li><li>• innovative</li><li>• appealing</li></ul>	<ul style="list-style-type: none"><li>• Make a product with both electrical and mechanical components.</li><li>• Link scientific knowledge by using lights, switches or buzzers.</li><li>• Communicate ideas in a range of ways, including by sketches and drawings which are annotated.</li><li>• Use electrical systems to enhance the quality of the products.</li></ul>
UKS2		<ul style="list-style-type: none"><li>• prototype</li><li>• labelled drawing</li><li>• communicate</li><li>• design specification,</li><li>• circuit</li><li>• series circuit</li><li>• parallel circuit</li><li>• fault</li><li>• connection</li><li>• Switches: toggle switch, push-to-break, push-to-make, reed switch, tilt switch, micro switch</li><li>• Equipment: sensor, alarm</li><li>• feedback</li></ul>	<ul style="list-style-type: none"><li>• Produce a detailed step-by-step plan explaining how a product will appeal to a specific audience, justifying planning in a convincing way.</li><li>• Evaluate appearance and function against original criteria.</li><li>• Use more complex IT program to help enhance the quality of product produced.</li><li>• Use electrical systems correctly and accurately to enhance a given product.</li><li>• Know how to test and evaluate designed products.</li><li>• Know which IT product would further enhance a specific product.</li></ul>

