

DT Progression Document

Strand	EYFS	A year 1 designer...	A year 2 designer...	End points	A year 3 designer...	A year 4 designer...	End points	A year 5 designer...	A year 6 designer...	End points
<p>COOKING AND NUTRITION Where food comes from Food preparation, cooking and nutrition</p>	<p>Make healthy choices about food, drink, activity and tooth brushing.</p> <p>To understand what helps a (edible) plant to grow.</p> <p>Learn what recipes are and follow these steps to create a dish (adult led).</p>	<p>Know that all food comes from plants or animals. Identify and sort food into groups.</p> <p>Prepare simple dishes safely and hygienically, without using a heat source.</p>	<p>Food has to be farmed, grown elsewhere (eg home) or caught). Identify origin of common foods, i.e milk, eggs etc</p> <p>Prepare simple dishes safely and hygienically, without using a heat source.</p> <p>Know that everyone should have 5 portions of fruit and vegetables every day.</p>	<p><i>Understand where food comes from and sort into groups, prepare dishes without using a heat source and know about having 5 portions of fruit/vegetables every day.</i></p>	<p>A healthy diet is made up from a balance of different food and drink</p> <p>Identify food groups & food grown in different countries.</p> <p>Know food is grown, reared or caught in the UK, Europe and wider world.</p> <p>Know about a range of fresh and processed ingredients for the product and whether it is grown, reared or caught.</p> <p>Understanding seasonality in relation to food and why it's beneficial.</p>	<p>Follow the main stages of a recipe listing ingredients, utensils and equipment.</p> <p>Identify a range of simple cooking techniques eg. baking, boiling, frying, roasting.</p> <p>Know that recipes can be adapted to change the appearance, taste, texture and aroma.</p>	<p><i>Understand what a healthy diet looks like and identify food groups, understand where food comes from across the globe, whether that be processed or grown/reared/caught, understand seasonality of food. To be able to plan a recipe and identify different simple cooking techniques. Understand that recipes can be adapted.</i></p>	<p>Use an increasing range of utensils and equipment for preparation and cooking techniques (baking, boiling, frying, roasting) to cook a sweet or savoury dish.</p> <p>Evaluate meals & consider if they contribute towards a balanced diet.</p>	<p>Plan a recipe to create a dish with hot and cold elements (such as chilli, rice and salsa), research existing products, plan ingredients and visit supermarket to source food and work within a budget. Ensure a variety of skills are used such as chopping, slicing, mixing and using a heat source. Understand how organic produce is grown.</p>	<p><i>Using more advanced utensils and equipment when preparing and cooking food and evaluate meals, specifically looking at whether they contribute to a balanced diet. Follow recipes and research existing products, plan ingredients and visit supermarket to source food. Understand how organic produce is grown.</i></p>

<p>TECHNICAL KNOWLEDGE</p> <ul style="list-style-type: none"> - Mechanisms - Structures - Textiles - Electrical systems 	<p>Explore how things work.</p> <p>Explore different materials freely, in order to develop their ideas about how to use them and what to make.</p>	<p>I can make a simple model using a slider and lever.</p> <p>Know and use technical vocabulary relevant to the project (pivots)</p> <p>Understand how freestanding structures can be made stiffer and more stable</p>	<p>Explore and use wheels, axles and axle holders.</p> <p>Distinguish between fixed and freely moving axles</p> <p>Know and use technical vocabulary relevant to the project (chassis, cab, vehicle)</p> <p>Know that a 3D textiles product can be assembled from 2 identical fabric shapes.</p>	<p><i>Develop skills to make and understand sliders, levers, wheels, axles and axle holder. Know and understand how freestanding structures can be made stiffer/more stable. Know and use relevant technical vocab and know how to assemble a 3D textile product.</i></p>	<p>Develop and use knowledge of how to construct strong, stiff shell structures</p> <p>Develop and use knowledge of nets of cubes and cuboids</p>	<p>Understand and use lever and linkage mechanisms. Distinguish between fixed and loose pivots</p> <p>Know that a single fabric shape can be used to make a 3D product.</p> <p>Understand how to securely join two pieces of fabric together.</p> <p>Understand the need for patterns and seam allowances. Understand how to combine an electrical circuit to meet a design brief.</p>	<p><i>Develop knowledge of how to make a structure strong and use cube and cuboid nets knowledge. Use levers and linkage mechanisms. Develop further textiles skills such how to join and make a 3D product. Understand how to use electrical circuits with a design brief.</i></p>	<p>Understand how gears and pulleys can be used to speed up or slow down.</p> <p>Understand how to strengthen, stiffen and reinforce 3-D frameworks.</p>	<p>Understand how cams, pulleys, gears can make something move (eg. moveable bridges).</p> <p>Understand how gears and pulleys can be used to change direction</p> <p>A 3-D textile product can be made from a combination of accurately made pattern pieces, fabric shapes and different fabrics. Fabrics can be strengthened, stiffened and reinforced where appropriate.</p> <p>Understand and use electrical circuits that incorporate a variety of components.</p>	<p><i>Understand how a variety of mechanisms can move and/or change the speed/direction of a product. Understand how to strengthen a 3D framework. Develop textiles skills and electrical circuits with a variety of components.</i></p>
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<p>DESIGNING Understanding contexts, user and purpose Generation of ideas Use of ICT</p>	<p>Develop their own ideas and then decide which materials to use to express them.</p>	<p>Create a simple design to meet a simple design criteria. Make a simple plan/draw a picture of intended design. Generate & label ideas using ICT.</p>	<p>Create a simple design to meet a simple design criteria then plan what to do next. Develop model and communicate their ideas through talking, mock ups and drawings. Make a simple plan/draw a picture of intended design and label it using ICT.</p>	<p><i>Create and develop ideas and plan designs with next steps. Use IT to plan/draw and label designs.</i></p>	<p>Use ideas from other people when designing Use annotated sketches to communicate ideas Develop design criteria to inform a design, eg. use, appearance, cost. Use ICT to create a labelled design/ plan with increasing detail</p>	<p>Generate realistic ideas and design criteria collaboratively through discussion, focusing on the needs of the user and the purpose of the product Incorporate circuits and electrical component into design brief (eg Earthquake warning system)</p>	<p><i>Use others' designs and ideas to develop own product design focusing on the needs of the user and purpose of the product. Continue to use IT in the designing process and begin incorporating electrical circuits into the product design.</i></p>	<p>Develop ideas through the analysis of existing products Use annotated sketches, cross sectional drawings & exploded diagrams to test and communicate my ideas. Produce a detailed step-by-step plan. Carry out research using surveys, interviews, questionnaires and web- based resources.</p>	<p>Identify the wants, needs preferences and values of particular individuals or groups. Independently develop design criteria for a functional and appealing product that is fit for purpose, communicating ideas clearly in a variety of ways. Model ideas using prototypes and pattern pieces. Incorporate circuits and electrical components into a design brief (eg. alarm system to protect crown jewels)</p>	<p><i>Identify the wants, needs preferences and values of particular individuals or groups and independently ensure the design criteria is fit for purpose through research such as surveys and questionnaires. Model ideas using prototypes and pattern pieces. Continue to incorporate circuits and electrical components into a design brief.</i></p>
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<p>MAKE Planning (select tools) Choosing materials</p>	<p>Use large muscle movements to paint and make marks.</p> <p>Choose the right resources to carry out their own plan.</p> <p>Use one handed tools and equipment, for example, making snips in paper with scissors.</p> <p>Make imaginative and complex 'small worlds' with blocks and construction kits.</p>	<p>Use simple utensils to cut food safely.</p> <p>Practical tasks such as marking out (template), cutting, joining and finishing with glue or tape.</p> <p>Cutting accurately & safely with scissors.</p> <p>Select and use a range of materials and begin to explain choices.</p> <p>Assemble, join and combine materials and components.</p>	<p>Use simple utensils and equipment to peel, cut, slice, grate and chop safely.</p> <p>Perform practical tasks such as marking out (template), cutting, joining & finishing by sewing (running stitch) and stapling.</p> <p>Explain why I have chosen specific textiles, materials and tools and explain why.</p> <p>Fold paper or card in different ways to make free standing structures, using masking tape to make joins.</p> <p>Use finishing techniques, including those from art and design</p>	<p><i>Use simple utensils and equipment to prepare food safely. Perform practical textile / tasks such as making template, cutting, joining by sewing and stapling. Explain choice of textiles, materials and tools. Fold and join paper/card to make free standing structures. Use finishing techniques from art and design such as painting.</i></p>	<p>Select from and use appropriate tools with some accuracy to cut, score, shape and join paper and card.</p> <p>Use finishing techniques suitable for the product they are creating</p> <p>Explain their choice of materials according to functional properties and aesthetic qualities</p> <p>Know and use appropriate equipment and utensils to prepare and combine food</p>	<p>Select fabrics and fastenings according to their functional characteristics.</p> <p>Joining & finishing using a variety of techniques (stitching ie blanket stitch, over sew, running and backward).</p> <p>Use of needles, thread, pins and scissors</p>	<p><i>Develop understanding of fabrics and fastenings and use this knowledge to choose materials appropriately. Continue to develop joining & finishing skills using a variety of techniques. Know and use appropriate equipment and utensils to prepare and combine food</i></p>	<p>Make, decorate and present the food for an intended user and purpose. (ie Jam).</p> <p>Formulate a clear plan and list of resources.</p> <p>Select and use from appropriate tools (eg junior hacksaws, clamps & bench hooks) to measure, mark out, cut, shape and join construction materials to make frameworks.</p> <p>Select materials and components according to functional properties and aesthetic qualities.</p>	<p>Select the most appropriate materials for tasks & frameworks for different structures; explaining what makes them strong showing an understanding of their working characteristics e.g. their flexibility, waterproofing, appearance, availability</p> <p>Use wire strippers, junior hacksaws and a hand drill for making structures.</p> <p>Develop joining & finishing techniques- selecting equipment & developing sewing skills (sewing needles and sewing machine).</p> <p>Joining right sides by making seams, sewing curved edges, tacking & attaching wadding. Where possible use</p>	<p><i>Make, decorate and present the food for an intended user and purpose and formulate a plan and list of resources. Select appropriate tools, materials and frameworks for different structures and be able to explain their choices. Use wire strippers, junior hacksaws and a hand drill for making structures. Develop joining, finishing and sewing techniques such as joining right sides by making seams, sewing curved edges, tacking & attaching wadding.</i></p>
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EVALUATE Existing products/designers Own products	Return to and build on their previous learning, refining ideas and developing their ability to represent them. Create collaboratively, sharing ideas, resource and skills.	Explain what went well and how it can be improved. Describe how something/an existing product works.	Talk about their own work & others work, identifying strengths and area for development e.g. their peers, professional craftspeople. Describe similarities and differences between their own work and others work.	<i>Discuss their own and peers' work identifying strengths and areas of development and describe similarities and differences.</i>	Investigate/ explain how an existing product is fit for purpose/ target market and how it benefits the user Suggest improvements to products made and describe how to implement them, taking into account others views. Explain the similarities and differences between the work of 2 designers & craftspeople.	Test and evaluate their own product against design criteria and the intended user and purpose. Explain how a significant designer/ inventor changed the world.	<i>Investigate, test, evaluate and explain how their design and existing designs are fit or unfit for purpose. Suggest improvements to products and describe how to implement them. Explain the similarities/differences between the work of 2 designers & craftspeople.</i>	Explain how an existing product appeals to a particular audience. Suggest alternative plans, outlining the positive features and draw backs. Test and evaluate my product/designs against original criteria e.g. appearance & function and adapt them as I develop my product/design. Analyse how inventions and products have changed people's lives	Evaluate the final product with reference back to the design brief (Mexican food). Present a detailed account of the significance of a designer/inventor e.g. benefit to the environment, health or transport.	<i>Explain how existing products appeal to particular audiences. Suggest alternative plans, outlining the positives and negatives features. Test and evaluate my product/designs against original criteria and adapt them as I develop my product/design. Analyse how inventions and products have changed people's lives and create detailed accounts of this. Evaluate the final product (food) with reference</i>