



Design & Technology Whole School Progression Document



NATIONAL CURRICULUM By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study.	<u>Key Stage 1:</u> Through a variety of creative and practical activities, pupils should be taught: <ul style="list-style-type: none">♣ the knowledge, understanding and skills needed to engage in an iterative process of designing and making.♣ They should work in a range of relevant contexts, such as the home and school, gardens and playgrounds, the local community, industry and the wider environment.♣ use the basic principles of a healthy and varied diet to prepare dishes♣ understand where food comes from.		<u>Key Stage 2:</u> Through a variety of creative and practical activities, pupils should be taught: <ul style="list-style-type: none">♣ knowledge, understanding and skills needed to engage in an iterative process of designing and making.♣ they should work in a range of relevant contexts, such as the home, school, leisure, culture, enterprise, industry and the wider environment.♣ 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.			
AREA	Y1	Y2	Y3	Y4	Y5	Y6
Design	Draw on their own experience to help generate ideas Suggest ideas and explain what they are going to do Identify a target group for what they intend to design and make Model their ideas in card and paper	Generate ideas by drawing on their own and other people's experiences Develop their design ideas through discussion, observation, drawing and modelling Identify a purpose for what they	Generate some independently thought ideas for an item, considering its purpose and the user/s. Identify a purpose and establish criteria for a successful product (eg pop up books – why they are needed)	Generate ideas, considering the purposes for which they are designing. Make labelled drawings from different views showing specific features. Develop a clear idea of what has to be done, planning how to use materials,	Generate ideas through brainstorming and identify a purpose for their product. Draw up a specification for their design Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and	Communicate their ideas through detailed labelled drawings. Develop a design specification Explore, develop and communicate aspects of their design proposals by modelling their ideas in a variety of ways.

	<p>Develop their design ideas applying findings from their earlier research</p>	<p>intend to design and make</p> <p>Identify simple design criteria</p> <p>Make simple drawings and label parts</p>	<p>Plan the order of their work before starting – learning the different types of mechanisms for the pop-up books.</p> <p>Explore, develop and communicate design proposals by modelling ideas.</p> <p>Make clear drawings with labels when designing their final pieces.</p>	<p>equipment and processes, and suggesting alternative methods of making, if the first attempts fail.</p> <p>Evaluate products and identify criteria that can be used for their own designs</p>	<p>suggesting alternative methods of making if the first attempts fail.</p> <p>Use results of investigations, information sources, including ICT when developing design ideas</p>	<p>Plan the order of their work, choosing appropriate materials, tools and techniques</p>
Make	<p>Make their design using appropriate techniques</p> <p>With help measure, mark out, cut and shape a range of materials</p> <p>Use tools eg scissors and a hole punch safely</p> <p>Assemble, join and combine materials and components together using a variety of temporary methods e.g., glues or masking tape</p>	<p>Begin to select tools and materials; use vocab' to name and describe them</p> <p>Measure, cut and score with some accuracy</p> <p>Use hand tools safely and appropriately</p> <p>Assemble, join and combine materials in order to make a product</p> <p>Cut, shape and join fabric to make a simple garment.</p>	<p>Select the appropriate tools and techniques for making their product.</p> <p>Measure, mark out, cut, score and assemble using the correct equipment with some accuracy.</p> <p>Work safely and accurately with a range of simple tools.</p> <p>Think about their ideas as they make progress and be</p>	<p>Select appropriate tools and techniques for making their product.</p> <p>Measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques.</p> <p>Join and combine materials and components accurately in temporary and permanent ways.</p>	<p>Select appropriate materials, tools and techniques.</p> <p>Measure and mark out accurately.</p> <p>Use skills in using different tools and equipment safely and accurately.</p> <p>Weigh and measure accurately (time, dry ingredients, liquids).</p> <p>Apply the rules for basic food hygiene and other safe practices e.g.,</p>	<p>Select appropriate tools, materials, components and techniques.</p> <p>Assemble components make working models.</p> <p>Use tools safely and accurately.</p> <p>Construct products using permanent joining techniques.</p> <p>Make modifications as they go along.</p>

	<p>Select and use appropriate fruit and vegetables, processes and tools</p> <p>Use basic food handling, hygienic practices and personal hygiene</p> <p>Use simple finishing techniques to improve the appearance of their product</p>	<p>Use basic sewing techniques</p> <p>Follow safe procedures for food safety and hygiene</p> <p>Choose and use appropriate finishing technique</p>	<p>willing change things if this helps them improve their work.</p> <p>Measure, tape or pin, cut and join fabric with some accuracy.</p> <p>Demonstrate hygienic food preparation and storage.</p> <p>Use finishing techniques strengthen and improve the appearance of their product using a range of equipment including ICT</p>	<p>Sew using a range of different stitches, weave and knit.</p> <p>Measure, tape or pin, cut and join fabric with some accuracy.</p> <p>Use simple graphical communication techniques</p>	<p>hazards relating to the use of ovens.</p> <p>Cut and join with accuracy to ensure a good-quality finish to the product</p>	<p>Pin, sew and stitch materials together create a product.</p> <p>Achieve a quality product</p>
Evaluate	<p>Evaluate their product by discussing how well it works in relation to the purpose</p> <p>Evaluate their products as they are developed, identifying strengths and possible changes they might make</p> <p>Evaluate their product by asking</p>	<p>Evaluate against their design criteria</p> <p>Evaluate their products as they are developed, identifying strengths and possible changes they might make</p> <p>Talk about their ideas, saying what they like and dislike about them</p>	<p>Evaluate their product against original design criteria e.g., how well it meets its intended purpose.</p> <p>Disassemble and evaluate familiar products</p>	<p>Evaluate their work both during and at the end of the assignment.</p> <p>Evaluate their products carrying out appropriate tests</p>	<p>Evaluate a product against the original design specification.</p> <p>Evaluate it personally and seek evaluation from others</p>	<p>Evaluate their products, identifying strengths and areas for development, and carrying out appropriate tests.</p> <p>Record their evaluations using drawings with labels.</p> <p>Evaluate against their original criteria and suggest</p>

	questions about what they have made and how they have gone about it					ways that their product could be improved
Construction (including electronics)	<p>Begin to measure and join different materials in appropriate ways (i.e., using glue, sticking tape)</p> <p>Choose, with support, tools and equipment to perform practical tasks such as cutting, shaping and joining</p> <p>Recognise the characteristics of a wide selection of materials and begin to choose them to meet the needs of a product</p> <p>Make simple plans before making objects (i.e., drawings, arranging pieces of construction before the building)</p> <p>Suggest ways to make</p>	<p>Begin to select tools and materials; use vocab' to name and describe them</p> <p>Measure, cut and score with some accuracy</p> <p>Use hand tools safely and appropriately</p> <p>Assemble, join and combine materials in order to make a product</p> <p>Cut, shape and join fabric to make a simple garment. Use basic sewing techniques</p> <p>Follow safe procedures for food safety and hygiene</p> <p>Choose and use appropriate finishing techniques</p>	<p>Select tools and materials; use vocab' to name and describe them</p> <p>Use hand tools safely and appropriately</p> <p>Assemble, join and combine materials accurately in order to make a product which suits the purpose.</p> <p>Cut, shape and join fabric to make a simple garment. Use basic sewing techniques</p> <p>Follow safe procedures for food safety and hygiene</p> <p>Choose and use appropriate finishing techniques</p>	<p>Measure carefully to avoid mistakes</p> <p>Attempt to make product strong</p> <p>Continue working on product even if original didn't work</p> <p>Make a strong, stiff structure</p> <p>Select most appropriate tools / techniques</p> <p>Explain alterations to product after checking it</p> <p>Grow in confidence about trying new / different ideas</p> <p>Use levers and linkages to create movement</p> <p>Use pneumatics to create movement</p>		<p>Select materials carefully, considering intended use of the product, the aesthetics and functionality</p> <p>Explain how product meets design criteria, reinforce and strengthen a 3D frame</p> <p>Refine product after testing, considering aesthetics, functionality and purpose</p> <p>Be confident to try new / different ideas</p> <p>Use different types of circuit in product</p> <p>Think of ways in which adding a circuit would improve product</p>

	<p>material/product stronger</p> <p>Develop their own ideas from initial starting points</p>			<p>Use number of components in circuit</p> <p>Program a computer to control product</p> <p>Use simple circuit in product</p> <p>Learn about how to program a computer to control product</p>		
Food technology	<p>Describe the texture of foods</p> <p>Wash hands & clean surfaces</p> <p>Think of interesting ways to decorate food</p> <p>Sort foods according to those which are most healthy and can be eaten frequently and those which should be eaten in small amounts and less regularly</p> <p>Group food products according</p>	<p>Explain hygiene and keep a hygienic kitchen</p> <p>Describe properties of ingredients and importance of varied diet</p> <p>Say where food comes from (animal, underground, etc.)</p> <p>Describe how food is farmed, home-grown, caught</p> <p>Draw eat well plate; explain there are groups of food</p> <p>Describe "five a day"</p>	<p>Explain why hygiene is important in the kitchen.</p> <p>Describe properties of ingredients and importance of varied diet through learning about nutrition</p> <p>Say where food comes from (animal, underground, etc.)</p> <p>Describe ideal and healthy diet for age group.</p> <p>Cut, peel and grate with increasing</p>	<p>Explain how to be safe/hygienic</p> <p>Think about presenting product in interesting/ attractive ways</p> <p>Understand ingredients can be fresh, pre-cooked or processed</p> <p>Begin to understand about food being grown, reared or caught in the UK or wider world</p> <p>Describe eat well plate and how a healthy diet=variety /</p>		<p>Understand a recipe can be adapted by adding /substituting ingredients</p> <p>Explain seasonality of foods</p> <p>Learn about food processing methods</p> <p>Name some types of food that are grown, reared or caught in the UK or wider world</p> <p>Adapt recipes to change appearance, taste, texture or aroma</p> <p>Describe some of the different</p>

	<p>to similarities (i.e., fruit, vegetables)</p> <p>Cut, peel and grate safely, with support</p>	<p>Cut, peel and grate with increasing confidence</p>	<p>confidence alongside measuring accurate amounts for a recipe.</p>	<p>balance of food and drinks</p> <p>Explain importance of food and drink for active, healthy bodies</p> <p>Prepare and cook some dishes safely and hygienically</p> <p>Use some of the following techniques: peeling, chopping, slicing, grating, mixing, spreading, kneading and baking</p>		<p>substances in food and drink, and how they can affect health</p> <p>Prepare and <i>cook</i> a variety of savoury dishes safely and hygienically including, where appropriate, <i>the use of heat source</i></p> <p>Use a range of techniques confidently such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking.</p>
Textiles	<p>Measure, cut and join textiles to make a product, with some support</p> <p>Choose suitable textiles</p>	<p>Measure textiles</p> <p>Join textiles together to make a product, and explain how I did it</p> <p>Carefully cut textiles to produce accurate pieces</p> <p>Explain choices of textile</p> <p>Understand that a 3D textile structure can be made from</p>	<p>Measure textiles and mark areas on the fabric.</p> <p>Join textiles together to make a product, and explain how I did it</p> <p>Carefully cut textiles to produce accurate pieces</p> <p>Explain choices of textile</p> <p>Understand that a 3D textile structure</p>	<p>Think about user when choosing textiles</p> <p>Think about how to make product strong</p> <p>Begin to devise a template</p> <p>Explain how to join things in a different way</p> <p>Understand that a simple fabric shape can be used to</p>		<p>Think about user's wants/needs and aesthetics when choosing textiles</p> <p>Make a prototype</p> <p>Make product attractive and strong</p> <p>Use a range of joining techniques</p> <p>Think about how product might be sold</p>

		two identical fabric shapes	can be made from two identical fabric shapes	make a 3D textiles project		<p>Think carefully about what would improve product</p> <p>Understand that a single 3D textiles project can be made from a combination of fabric shapes</p>
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