<table>
<tr><td>EYFS</td><td colspan="3">Expressive arts and design: Exploring and using media and materials.
30-50months:
Uses various construction materials.
Beginning to construct, stacking blocks vertically and horizontally, making enclosures and creating spaces.
Joins construction pieces together to build and balance.
Realises tools can be used for a purpose.
40-60 months:
Understands that different media can be combined to create new effects.
Manipulates materials to achieve a planned effect.
Constructs with a purpose in mind, using a variety of resources.
Uses simple tools and techniques competently and appropriately.
Selects appropriate resources and adapts work where necessary.
Selects tools and techniques needed to shape, assemble and join materials they are using.

Expressive arts and design: Being imaginative
30-50 months
Developing preferences for forms of expression.
Uses available resources to create props to support role-play.
Captures experiences and responses with a range of media, such as music, dance and paint and other materials or words.
40-60 months
Create simple representations of events, people and objects.</td><td colspan="3">Expressive arts and design: Exploring and using media and materials.
ELG:
Children sing songs, make music and dance, and experiment with ways of changing them. They safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.

Expressive arts and design: Being imaginative.
ELG:
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.</td></tr>
<tr><td>Area of Skill</td><td>YEAR 1</td><td>YEAR 2</td><td>YEAR 3</td><td>YEAR 4</td><td>YEAR 5</td><td>YEAR 6</td></tr>
<tr><td rowspan="2">Design – Developing, planning and communicating ideas; identifying the context, use and purpose.
 
</td><td colspan="2">When designing and making, pupils should be taught to:
Design
• design purposeful, functional, appealing products for themselves and other users based on design criteria
• generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology</td><td colspan="4">When designing and making, pupils should be taught to:
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
• generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design</td></tr>
<tr><td>Draw on their own experience to help generate ideas and identify a target group for the product. Understand what a design is.</td><td>Generate ideas by drawing on their own and other people's experiences. Identify the purpose of their product for the target group. Identify simple design criteria.</td><td>Generate ideas for an item, considering its purpose and the user/s. Gather information about what individuals want/need through research. Identify a purpose and start to establish design criteria for their product.</td><td>Generate ideas, considering the purposes for which they are designing. Identify a purpose and establish some design criteria for a successful product. Gather information, through research, about what groups and individuals want/need. Take account of the ideas of others when designing. Start to use Computer-aided design.</td><td>Generate innovative ideas through brainstorming and identify a purpose for their product through research. Develop a simple specification for their design. Take a user's view into account when designing. Carry out research, and surveys to identify the needs/wants/preferences of groups and individuals. Develop use of computer-aided design.</td><td>Explore, develop and communicate aspects of their design proposals by modelling their ideas in a variety of ways. Use market research, and a range of information, to inform plans. Develop a design specification. Carry out research, surveys, questionnaires and interviews to identify the needs/wants/preferences of groups and individuals. Recognise when products have to fulfil conflicting requirements. Continue to develop use of computer-aided design.</td></tr>
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	Suggest ideas and explain what they are going to do Use pictures and words to plan. (year 1). Explain in simple terms what they want to do. Model their ideas in card and paper.	Develop their design ideas through discussion, observation , drawing and modelling Use pictures and labels to plan. (Year 2). Explain with increasing detail (e.g more detail on type of materials and joins). Explore materials, make templates and mock-ups, starting to consider what will work and what might not.	Plan the order of their work before starting. Plan using specific materials and explain my choice. Start to use lists of equipment and materials. Put together a step-by-step plan showing the order and also what equipment and tools they need. Describe their design using an accurately labelled sketches and diagrams. . Explore, develop and communicate design proposals by modelling ideas. Model ideas using prototypes. Discuss how realistic their plan was.	Develop a clear plan of what has to be done, planning how to use materials and equipment. Include lists of tools, equipment and materials. Make labelled drawings from different views showing specific features. Use cross-sectional drawings. Show that their design meets a range of requirements. Evaluate products and identify criteria that can be used for their own designs. Model ideas using prototypes and pattern pieces. Share and clarify ideas through discussion.	Develop a clear idea of what has to be done, planning how to use materials, tools, equipment and processes, and suggesting alternative methods of making if the first attempts fail. Produce a detailed step-by-step plan. Continue to develop use of cross-sectional drawings and diagrams of different views. Suggest alternative plans and say what the good points and drawbacks are about each. Start to produce step-by-step plans Use results of investigations, information sources, including ICT when developing design ideas. Develop use of prototypes.	Plan the order of their work, choosing appropriate materials, tools, equipment and techniques Produce step-by-step plans Discuss and refine their plan if necessary after justifying it to someone else. Ensure that the plan words within constraints (e.g budget, time and resources) as well as considering culture and society. Use knowledge of designers to influence their own design when appropriate. Communicate their ideas through detailed labelled drawings. Continue to develop their use of prototypes.
Knowledge of Designers	Know what a designer does Know the names and the products of some British designers Say what they like and dislike about the product and the designer's work		Know some designers from history Talk about some of the tools, techniques and design used by the designer		Know how key events and individuals have influenced the world (in terms of products) Compare and contrast the work of different designers (e.g. historical and modern) Give reasons for the decisions made by the designer	

Working with tools, equipment, materials and components to make quality products. 	When designing and making, pupils should be taught to: **Make** • select from and use a range of tools and equipment to perform practical tasks, (or 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 **Technical knowledge** • 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.		When designing and making, pupils should be taught to: **Make** • select from and use a wider range of tools and equipment to perform practical tasks, such as 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 **Technical knowledge** • apply their understanding of how to strengthen, stiffen and reinforce more complex structures • understand and use mechanical systems in their products, (for example as 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 programme, monitor and control their products.			
	Make their design using appropriate techniques, explaining what they are making. With help measure, mark out, cut and shape a range of materials. Use tools (*eg scissors, junior hacksaw and a hole punch)* safely. explaining what they are doing.	Begin to select tools and materials; use vocab to name and describe them Measure, cut and score with some accuracy. Use a wider range of hand tools safely and appropriately explaining why they chose them.	Select tools and techniques for making their product Measure, mark out, cut and score components with more accuracy (cm). Develop skills of working safely and accurately with a range of simple tools. Start to select from a range of	Select appropriate tools and techniques for making their product Measure, mark out, cut, score and shape a range of materials, using appropriate tools, equipment and techniques (cm). Continue to develop skills of working safely and accurately with a larger range of tools. Start to select	Select (from a variety) appropriate materials, tools and techniques Measure and mark out accurately (cm and/or mm) Working safely and accurately with a further variety tools. Select tools and equipment suitable for a task,	Select (from a variety) appropriate tools, materials, components and techniques Measure and mark out precisely and accurately. Use all tools safely and accurately. Select tools and equipment suitable

			tools. Eg. Scissors, hacksaws, hole punches, drills.	from a range of tools. Eg. Scissors, hacksaws, hole punches, drills.	explaining choices. As for year 4 plus hammers, screwdrivers. Etc.	for a tasks, explaining choices in relation to skills and techniques.
	Assemble, join and combine materials and components together using a variety of methods e.g. glues or masking tape. Understand what a join is. Start to use a template.	Assemble, join and combine materials in a wider variety of ways in order to make a product. Explain why they used the materials according to their characteristics. Make and use own template.	Continue to assemble, join and combine materials with increasing accuracy in order to make a product. Start to understand the use temporary joins. Select materials and components for the task.	Join and combine materials and more accurately in temporary and permanent ways. Select materials and components for the task.	Cut and join with accuracy to ensure a good-quality finish to the product. Persevere through the making process. Explain choices of materials and components according to functional qualities. Use techniques that involve a greater number of steps.	Construct products using permanent joining techniques Make modifications as they go along e.g. joins modified to make them strong and stable, or flexible according to need. Explain choices of materials and components according to functional and aesthetic qualities. Use techniques that involve a greater number of steps.
	Cut and join materials to make something. Start to use basic sewing techniques.	Cut, shape and join fabric to make a simple garment. Use basic sewing techniques.	Measure, tape or pin, cut and join fabric with some accuracy	Sew using a range of different stitches, weave and/or knit. Measure, tape or pin, cut and join fabric with some accuracy	Pin, sew and stitch materials together with increasing accuracy to create a product	Pin, sew and stitch materials together accurately create a product
	Use simple finishing techniques to improve the appearance of their product. Take pride in their work.	Choose and use appropriate finishing techniques. Ensure work looks as neat as possible.	Use finishing techniques to strengthen and improve the appearance of their product. Think about their ideas as they make progress and be willing change things if this helps improve their work.	Use finishing techniques to strengthen and improve the appearance of their product using a range of equipment including ICT. Change things if this improves their work. Discuss whether their finished product is going to be good quality.	Apply a range of finishing techniques. Explain why their finished product is going to be of good quality. Be conscious of the need to produce something that will be liked by others. Continue to work at their product even though their original idea might not have worked.	Accurately apply a range of finishing techniques. Achieve a quality product. Explain how the product will appeal to the audience. Change the way they are working if needed. E.g. demonstrate resourcefulness by making refinements.
Technical knowledge (making products work). 	Understand about the simple working characteristics of materials and components Understand about the movement of simple mechanisms including levers, sliders (Year 1) wheels and axles (Year 2) Know the correct technical vocabulary for the projects they are undertaking Understand how freestanding structures can be made stronger, stiffer and more stable Make a product that moves using a turning mechanism (e.g. wheels, winding) or a lever or a hinge (to make a movement)		Understand how to use learning from science and maths to help design and make products that work Know that materials have both functional properties and aesthetic qualities Know that materials can be combined and mixed to create more useful characteristics Know that mechanical and electrical systems have an input, process and output Use the correct technical vocabulary for the projects they are undertaking Use simple circuits to either illuminate or create motion Make a product that uses both electrical and mechanical components Combine a number of components well in my product		Understand how to use learning from science and maths to help design and make products that work Understand how cams, pulleys and gears create movement Understand how more complex electrical circuits and components can be used to create functional products Understand how to program a computer to monitor changes in the environment / control their products Know how to reinforce/strengthen a 3D framework Know that a 3D textiles product can be made from a combination of fabric shapes Know that a recipe can be adapted a by adding or substituting one or more ingredients Choose components that can be controlled by switches or by ICT equipment Use science skills (resistance, batteries in series or parallel, variable resistance to dim lights or control speed) to alter the way electrical products behave Use precise electrical connections
Evaluating processes and products.	When designing and making, pupils should be taught to: **Evaluate** • explore and evaluate a range of existing products • evaluate their ideas and products against design criteria		When designing and making, pupils should be taught to: **Evaluate** • investigate and analyse a range of existing products • evaluate their ideas and products against their own design criteria and consider the views of others to improve their work • understand how key events and individuals in design and technology have helped shape the world			

	Evaluate their product by discussing how it works and how well it works in relation to the purpose. Talk about their ideas, saying what they like and dislike about them.	Evaluate product and materials against their design and the purpose – explain what went well and, if they did it again, what they would improve. Explain why they chose certain materials, techniques and tools. Evaluate their products as they are developed, identifying strengths and possible changes they might make	Evaluate their product against original design criteria (*e.g. how well it meets its intended purpose)* starting to test their work. Explain what they changed to make their design even better. Identify the strengths and weaknesses of their ideas and products Explain why they chose certain materials, tools and techniques	Evaluate their work both during and at the end of the assignment for both appearance and the way it works. Start to consider how they will check to see if their design was successful. Evaluate their products carrying out appropriate tests. Consider how they could make their design, and the product, even better. Identify the strengths and weaknesses of their ideas and products. Consider the views of others, including intended users, to improve their work	Evaluate a product (appearance and function) against the original design specification. Evaluate it personally and seek evaluation from others. Evaluate throughout the making process, as well as at the end, to ensure that the design is the best it can be and whether anything can be improved. Refer back to their design criteria as they design and make Use their design criteria to evaluate their completed products	Critically evaluate their products, identifying strengths and areas for development, and carrying out appropriate tests. Ensure evaluations are thorough and robust. Record their evaluations using drawings with labels. Evaluate against their original criteria and suggest ways that their product could be improved. Explain how different materials and processes may have made a better product. Evaluate the quality of the design, manufacture and fitness for purpose of their products as they design and make
Evaluate (existing products)	Investigate familiar products - what products are, who they are for, how they are made, what materials are used and why the materials were used. Disassemble and evaluate familiar products		Investigate - how well products have been designed, how well products have been made, why materials have been chosen, what methods of construction have been used, how well products work, how well products achieve their purposes and how well products meet user needs and wants Disassemble and evaluate familiar products Investigate - who designed and made the products, where products were designed and made, when products were designed and made and whether products can be recycled or reused. Research and evaluate existing products to inform planning. Understand that products are designed for a purpose (e.g. a problem, an audience, an event).		Investigate - how much products cost to make, how innovative products are and how sustainable the materials in products are Research and evaluate existing products giving reasons for the decisions of the designers (materials, design, tools, techniques	
COOKING AND NUTRITION	Use the basic principles of a healthy and varied diet to prepare dishes Understand where food comes from		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			
WHERE FOOD COMES FROM	That all food comes from plants or animals. That food has to be farmed, grown elsewhere (e.g. home) or caught		That food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chickens and cattle) and caught (such as fish) in the UK, Europe and the wider world.		That seasons may affect the food available Know about local produce How food is processed into ingredients that can be eaten or used in cooking Know where different crops can be found around the world Know different cultures have different diets.	
FOOD PREPARATION, COOKING AND NUTRITION	Use basic food handling, hygienic practices and personal hygiene – year 1 Explain what it means to be hygienic and demonstrate some awareness of how to be hygienic in a kitchen – Year 2		Start to demonstrate hygienic food preparation and storage – year 3 Know what to do to be hygienic and safe – year 4		Apply the rules for basic food hygiene and other safe practices *e.g. hazards relating to the use of ovens.* Describe what they do to be both hygienic and safe – year 5.	

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	Name and sort foods into the five groups in The eatwell plate. That everyone should eat at least five portions of fruit and vegetables every day. That somethings are dangerous to eat raw Prepare a healthy snack and breakfast How to prepare simple dishes safely and hygienically, without using a heat source. How to use techniques such as cutting, peeling and grating with adult help. Know heat changes food Describe the properties of the ingredients they are using.	That a healthy diet is made up from a variety and balance of different food and drink, as depicted in The eatwell plate. Understand which foods are unhealthy and why we need a healthy diet. That to be active and healthy, food and drink are needed to provide energy for the body. Prepare a healthy lunch Select ingredients for my product with reasons. Begin to measure out ingredients. Use cooking techniques such as baking or boiling. Start to weigh and measure ingredients. Make sure that their product looks attractive and interesting. Describe how their combined ingredients come together.	Apply the rules for basic food hygiene and other safe practices *e.g. hazards relating to the use of ovens.* Describe what they do to be both hygienic and safe. Explain how their product should be stored with reasons – year 6 That different food and drink contain different substances – nutrients, water and fibre – that are needed for health Design and prepare a healthy dinner Use cooking techniques such as grilling, boiling, frying and baking. That recipes can be adapted to change the appearance, taste, texture and aroma. Weigh and measure accurately (time, dry ingredients, liquids). Use a wider range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking. Know that different cultures have different diets. Explain why they have chosen ingredients in a dish including taste and appearance.
TEXTILES 	Know that textiles have different properties: touch, insulation, texture and waterproof. Describe textiles by the way they feel. Select the appropriate textile so that it does the job I want it to. Measure, mark out and cut fabric. Join fabrics using glue and running stitch. Alter a textile to make it stronger. Make a product from textiles. Make sure my work is neat and tidy.	Textile work incorporates the views of intended users' and for the purpose. Select the appropriate textile(s) for my product. Know that the texture and other properties of materials affect choice. Use sharp scissors accurately to cut textiles. Combine materials to add strength or visual appeal. Use art textiles skills such as stitching to help create a product that is sturdy and fit for purpose. Textile products include structural changes, such as plaiting or weaving to create new products such as rope, belts, bracelets etc.	Products have an awareness of commercial appeal. Experiment with a range of materials until I find the right mix of affordability, appeal and appropriateness for the job. Mark out using patterns and templates. Join textiles using art skills of stitching, embroidering and plaiting to make desirable and durable products. Combine art skills to add design and colour to my work.

OUR TOPICS	3D Circus Tent Jack In The Box Under The Sea Scene Superhero Masks Pop Up Puppets Making windsocks Kite making	Memory Boxes Welsh Cakes Rainforest Shoebox Scenes Clay fossils Roman Shields 3D Viking Longships Anderson Shelters and Gas Masks Volcanoes Theatre Masks	Marble runs and Marbulous Structures Cooking for Mother's Day Felt Phone Cases Programming Adventures Automata Animals Global Food

Curriculum Progression Document – Design Technology