



Design and Technology Curriculum Progression

	<i>EYFS</i>	<i>Year 1/Year 2</i>	<i>Year 3/Year 4</i>	<i>Year 5/Year 6</i>
Design		<p>NC- design purposeful, functional, appealing products for themselves and other users based on design criteria</p> <p>NC-generate, develop, model and communicate their ideas through talking, drawing, templates, mock ups and, where appropriate, information and communication technology</p>	<p>NC-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.</p> <p>NC-generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer aided design.</p>	<p>NC-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.</p> <p>NC-generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer aided design.</p>
	<p>I can construct with a purpose in mind, using a variety of resources.</p> <p>Can I use various construction materials? (EAD 30-50)</p> <p>Am I beginning to construct, stacking blocks, making enclosures and creating spaces? (EAD 30-50)</p> <p>Can I join construction pieces together to build and balance? (EAD 30-50)</p>	<p>I can look at existing products to generate ideas</p> <p>I can use their knowledge of existing products and their own experience to help generate their ideas;</p> <p>I can design a product which is appealing for myself and others based on my own design criteria</p> <p>I can design products that have a purpose and are aimed at an intended user</p> <p>I can talk about my design</p> <p>I can explain how their products will look and work through talking and simple annotated drawings</p> <p>I can use draw and label my design</p> <p>I can design models using simple computing software</p>	<p>I can consider the design features and create a design brief for a product.</p> <p>I can identify the design features of their products that will appeal to intended customers;</p> <p>I can generate ideas through looking at a range of existing products.</p> <p>I can use their knowledge of a broad range of existing products to help generate their ideas</p> <p>I can design a product that has a clear purpose</p> <p>I can design innovative and appealing products that have a clear purpose and are aimed at a specific user;</p> <p>I can talk about how my product works</p> <p>I can explain how particular parts of their products work;</p>	<p>I can use a range of research techniques to develop a functional product</p> <p>I can use research to inform and develop detailed design criteria to inform the design of innovative, functional and appealing products that are fit for purpose and aimed at a target market</p> <p>I can produce a detailed design specification which considers the needs, wants and preferences of the intended user.</p> <p>I can design products that have a clear purpose and indicate the design features of their products that will appeal to the intended user;</p> <p>I can explain how the parts of my product work</p>

	<p>Do I realise tools can be used for a purpose? (EAD 30-50)</p>	<p>I can plan and test some of my ideas using templates and mock-ups I can plan and test ideas using templates and mock-ups;</p> <p>I can make simple designs from a design brief I can understand and follow simple design criteria</p> <p>I can understand different contexts for a product e.g home or school. I can work in a range of relevant contexts, for example imaginary, story-based, home, school and the wider environment.</p>	<p>I can use annotated sketches to develop ideas. I can use annotated sketches and cross-sectional drawings to develop and communicate their ideas;</p> <p>I can different ideas for my design I can explore different initial ideas before coming up with a final design</p> <p>I can start to explain my choice of materials and components including function and aesthetics when planning, I can explain my choice of materials and components including function and aesthetics when planning,</p> <p>I can test ideas out through using mock-ups of some parts I can test ideas out through using prototypes;</p> <p>I am starting to use computer-aided design to develop and communicate my ideas I can use computer-aided design to develop and communicate their ideas</p> <p>I can follow simple design criteria I can develop and follow simple design criteria;</p> <p>I can in a range of relevant contexts, for example entertainment, the home, school, leisure, food industry and the wider environment. I can work in a broader range of relevant contexts, for example entertainment, the home, school, leisure, food industry and the wider environment.</p>	<p>I can explain how particular parts of their products work</p> <p>I can create sketches, cross sectional drawings and exploded diagrams of my design. I can use annotated sketches, cross-sectional drawings and exploded diagrams (possibly including computer-aided design) to develop and communicate their ideas;</p> <p>I can create a number of different designs and explain why I have made my final choice of design. I can generate a range of design ideas and clearly communicate final designs;</p>
<p>Make</p>		<p>NC-select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]</p>	<p>NC-select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately</p>	

		NC-select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics	NC-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	
<p>Make</p>	<p>I am beginning to be interested in, and can describe the texture of things.</p> <p>I can experiment to create different textures</p> <p>I can use various construction materials.</p> <p>I am beginning to construct, stacking blocks vertically and horizontally, making enclosures and creating spaces.</p> <p>I can join construction pieces together to build and balance</p> <p>I realise tools can be used for a purpose</p> <p>I can operate mechanical toys, e.g. turn the knob on a wind-up toy or pull back on a friction car.</p> <p>I can show skill in making toys work by pressing parts or</p>	<p>I can with support follow parts of a simple plan or recipe I can with support, follow a simple plan or recipe;</p> <p>I know that different tools are suitable for different tasks and I am able to select some tools appropriate to the task. I can begin to select from a range of hand tools and equipment, such as scissors, graters, zesters, safe knives, juicer;</p> <p>I can make a selection from a range of materials, textiles and components I can select from a range of materials, textiles and components according to their characteristics; I am aware that I need to use hand tools and kitchen safely and hygienically. I can learn to use hand tools and kitchen equipment safely and appropriately and learn to follow hygiene procedures;</p> <p>I am starting to use a range of materials and components, including textiles and food ingredients; I can use a range of materials and components, including textiles and food ingredients;</p> <p>I am starting to measure and mark out I can, with help, measure and mark out;</p> <p>I can with support cut, shape and score materials with some accuracy I can cut, shape and score materials with some accuracy;</p> <p>I can with support assemble, join and combine materials, components or ingredients I can assemble, join and combine materials, components or ingredients;</p>	<p>I I can with growing confidence select from a range of tools and equipment for a purpose I can with growing confidence, carefully select from a range of tools and equipment, explaining their choices;</p> <p>I can select an appropriate material or component for an intended purpose I can select from a range of materials and components according to their functional properties and aesthetic qualities;</p> <p>I can sequence the stages of making when given the main stages. I can describe the main stages of making in a systematic order;</p> <p>I am learning to use a range of tools and equipment safely, appropriately and accurately and learn to follow hygiene procedures; I can learn to use a range of tools and equipment safely, appropriately and accurately and learn to follow hygiene procedures;</p> <p>I can use a range of materials and components, including construction materials and kits, textiles and mechanical and electrical components; I can use a wider range of materials and components, including construction materials and kits, textiles and mechanical and electrical components;</p> <p>I can with support measure and mark out to the nearest cm and millimetre I can with growing independence, measure and mark out to the nearest cm and millimetre;</p> <p>I can with support cut, shape and score materials with some degree of accuracy</p>	<p>I can talk about what to do next to plan I can independently plan what to do next;</p> <p>I can select from a wide range of tools and equipment appropriate for a task. I can with growing confidence, select from a wide range of tools and equipment, explaining their choices;</p> <p>I can select from a range of materials and components according to their functional properties and aesthetic qualities; I can select from a range of materials and components according to their functional properties and aesthetic qualities and explain why I have selected them.</p> <p>I can create step-by-step plans as a guide to making; I can create step-by-step plans as a guide to making for someone else to follow</p> <p>I can learn to use a range of tools and equipment safely and appropriately and learn to follow hygiene procedures; I can use a range of tools and equipment safely and appropriately and learn to follow hygiene procedures;</p> <p>I can with support take exact measurements and mark out, to within 1 millimetre; I can independently take exact measurements and mark out, to within 1 millimetre;</p> <p>I can use a full range of materials and components, including construction materials and kits, textiles, and mechanical components;</p>

	<p>lifting flaps to achieve effects such as sound, movements or new images</p>	<p>I can with support demonstrate how to cut, shape and join fabric to make a simple product; I can demonstrate how to cut, shape and join fabric to make a simple product;</p> <p>I am starting to manipulate fabrics in simple ways to create the desired effect; I can manipulate fabrics in simple ways to create the desired effect; I can with support use a basic running stitch I can use a basic running stitch;</p> <p>I can with support cut, peel and grate ingredients, including measuring and weighing ingredients using measuring cups; I can cut, peel and grate ingredients, including measuring and weighing ingredients using measuring cups;</p> <p>I can begin to use simple finishing techniques to improve the appearance of their product, such as adding simple decorations. I can begin to use simple finishing techniques to improve the appearance of their product, such as adding simple decorations.</p>	<p>I can cut, shape and score materials with some degree of accuracy;</p> <p>I can assemble, join and combine material and components I can assemble, join and combine material and components with some degree of accuracy;</p> <p>I can demonstrate how to measure, cut, shape and join fabric to make a simple product; I can demonstrate how to measure, cut, shape and join fabric with some accuracy to make a simple product;</p> <p>I can join textiles with an appropriate sewing technique; I can join textiles with an appropriate sewing technique with some accuracy</p> <p>I can begin to select and use different and appropriate finishing techniques to improve the appearance of a product such as hemming, tie-dye, fabric paints and digital graphics. I can select and use different and appropriate finishing techniques to improve the appearance of a product such as hemming, tie-dye, fabric paints and digital graphics.</p>	<p>I can cut a range of materials with precision and accuracy; I can use a full range of materials and components, including construction materials and kits, textiles, and mechanical components;</p> <p>I can cut a range of materials with precision and accuracy with support I can cut a range of materials with precision and accuracy;</p> <p>I can shape and score materials with precision and accuracy with support I can shape and score materials with precision and accuracy;</p> <p>I can assemble, join and combine materials and components I can assemble, join and combine materials and components with accuracy;</p> <p>I can demonstrate how to measure, make a seam allowance, tape, pin, cut, shape and join fabric I can demonstrate how to measure, make a seam allowance, tape, pin, cut, shape and join fabric with precision to make a more complex product;</p> <p>I can join textiles using a variety of stitches, such as backstitch, whip stitch, blanket stitch; I can join textiles using a greater variety of stitches, such as backstitch, whip stitch, blanket stitch;</p> <p>I can refine the finish using techniques to improve the appearance of my product, such as sanding or a more precise scissor cut after roughly cutting out a shape. I can refine the finish using techniques to improve the appearance of my product, such as sanding or a more precise scissor cut after roughly cutting out a shape.</p>
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<i>Evaluate</i>		<p>NC-explore and evaluate a range of existing products</p> <p>NC-evaluate their ideas and products against design criteria</p>	<p>NC-investigate and analyse a range of existing products</p> <p>NC- evaluate their ideas and products against their own design criteria and consider the views of others to improve their work</p> <p>NC- understand how key events and individuals in design and technology have helped shape the world</p>	
<i>Evaluate</i>	<p>I can manipulate materials to achieve a planned effect</p>	<p>I can say what is good or bad about existing products through discussions and simple written evaluations</p> <p>I can explore and evaluate existing products mainly through discussions, comparisons and simple written evaluations</p> <p>I can say how a product could be improved</p> <p>I can explain positives and things to improve for existing products;</p> <p>I can say what some products are made from</p> <p>I can explore what materials products are made from</p> <p>I talk about my design ideas</p> <p>I can talk about their design ideas and explain what I am making;</p> <p>I can start to think about changes to my design whilst I am making</p> <p>I can start to identify strengths and possible changes they might make to refine their existing design as I am making</p> <p>I can explain if a product was successful.</p> <p>I can evaluate their products and ideas against their simple design criteria;</p> <p>I know that to improve my design I might need to change the process to redo some parts</p> <p>I can start to understand that the iterative process sometimes involves repeating different stages of the process</p>	<p>I can explore and evaluate if an existing product meets its intended purpose</p> <p>I can explore and evaluate existing products, explaining the purpose of the product and whether it is designed well to meet the intended purpose;</p> <p>I can say what materials/ingredients products are made from</p> <p>I can explore what materials/ingredients products are made from and suggest reasons for this</p> <p>I can make changes to my design criteria considering the views of others to improve my product.</p> <p>I can consider my design criteria as I make progress and am willing to alter my plans, sometimes considering the views of others if this helps me to improve my product;</p> <p>I can explain where my product meets my original design criteria</p> <p>I can evaluate my product against my original design criteria;</p> <p>I can</p> <p>I can evaluate the key events, including technological developments, and designs of individuals in design and technology that have helped shape the world.</p>	<p>I can complete competitor analysis of other products on the market</p> <p>I can complete detailed competitor analysis of other products on the market;</p> <p>I can evaluate the quality of design, manufacture and fitness for purpose of products I design and make;</p> <p>I can critically evaluate the quality of design, manufacture and fitness for purpose of products I design and make;</p> <p>I can evaluate where a product has met the original design criteria</p> <p>I can evaluate my ideas and products against the original design criteria, making changes as needed.</p>
<i>Technical knowledge</i>		<p>NC-build structures, exploring how they can be made stronger, stiffer and more stable</p>	<p>NC-apply their understanding of how to strengthen, stiffen and reinforce more complex structures</p>	

		<p>NC-explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.</p>	<p>NC- understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]</p> <p>NC- understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]</p> <p>NC- apply their understanding of computing to program, monitor and control their products.</p>	
		<p>I can build simple structures, exploring how they can be made stronger, stiffer and more stable.</p> <p>I can build simple structures, explaining how they can be made stronger, stiffer and more stable.</p> <p>I can talk about the simple working characteristics of materials and components;</p> <p>I can talk about and start to understand the simple working characteristics of materials and components;</p> <p>I can explore products using mechanisms, such as levers, sliders and wheels.</p> <p>I can explore and create products using mechanisms, such as levers, sliders and wheels.</p>	<p>I understand that materials have both functional properties and aesthetic qualities;</p> <p>I understand that materials have both functional properties and aesthetic qualities;</p> <p>I can apply their understanding of how to strengthen, stiffen and reinforce more complex structures</p> <p>I can apply their understanding of how to strengthen, stiffen and reinforce more complex structures in order to create more useful characteristics of products</p> <p>I demonstrate and am starting to understand how mechanical and electrical systems have an input and output process;</p> <p>I understand and demonstrate how mechanical and electrical systems have an input and output process;</p> <p>I can make and represent simple electrical circuits, such as a series and parallel, and components to create a product</p> <p>I can make and represent simple electrical circuits, such as a series and parallel, and components to create functional products;</p> <p>I can simply explain how mechanical systems such as levers and linkages create movement;</p> <p>I can explain how mechanical systems such as levers and linkages create movement;</p> <p>I am starting to use mechanical systems in my products.</p> <p>I can use mechanical systems in my products to create functional products.</p>	<p>I can apply my understanding of how to strengthen, stiffen and reinforce more complex structures;</p> <p>I can apply my understanding of how to strengthen, stiffen and reinforce more complex structures in order to create more useful characteristics of products;</p> <p>I understand that mechanical and electrical systems have an input, process and output;</p> <p>I understand and demonstrate that mechanical and electrical systems have an input, process and output;</p> <p>I can explain how mechanical systems, such as cams, create movement and I am starting to use these in my products;</p> <p>I can explain how mechanical systems, such as cams, create movement and use mechanical systems in my products;</p> <p>I can apply my understanding of computing to program, monitor and control a product.</p> <p>I can apply my understanding of computing to program, monitor and control a product.</p>

Food		<p>NC-use the basic principles of a healthy and varied diet to prepare dishes</p> <p>NC-understand where food comes from.</p>	<p>NC-understand and apply the principles of a healthy and varied diet</p> <p>NC-prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques</p> <p>NC-understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.</p>	
Food	<p>I understand that equipment and tools have to be used safely</p> <p>I eat a healthy range of foodstuffs and understands need for variety in food</p>	<p>I know that food comes from different places in the world</p> <p>I can explain where in the world different foods originate from</p> <p>I can understand that all food comes from plants or animals</p> <p>I can name some foods that comes from either plants or animals</p> <p>I know that food is made in different ways</p> <p>I can understand that food has to be farmed, grown elsewhere (e.g. home) or caught</p> <p>I can name each section of the EatWell plate.</p> <p>I can name and sort foods into the five groups in the Eatwell Guide;</p> <p>I know that I should eat at least 5 portions of fruit and veg each day</p> <p>I can understand that everyone should eat at least five portions of fruit and vegetables every day and start to explain why</p> <p>I can plan a dish based on the Eatwell</p> <p>I can use what I know about the Eatwell Guide to plan and design dishes.</p>	<p>I know that different food is grown at different times, in different places and in different ways.</p> <p>I am starting to know when, where and how food is grown (such as herbs, tomatoes and strawberries) in the UK, Europe and the wider world;</p> <p>I am starting to understand how to prepare and cook a variety of savoury dishes safely and hygienically.</p> <p>I understand how to prepare and cook a variety of predominantly savoury dishes safely and hygienically;</p> <p>I can use a heat source safely with support.</p> <p>I can, with support, use a heat source to cook ingredients showing awareness of the need to control the temperature of the hob and/or oven;</p> <p>I am starting to use a range of techniques such as mashing, whisking, crushing, grating, cutting, kneading and baking;</p> <p>I can use a range of techniques such as mashing, whisking, crushing, grating, cutting, kneading and baking;</p> <p>I understand all sections of the EatWell plate and why they differ in size and can explain this when planning dishes</p> <p>I can explain that a healthy diet is made up of a variety and balance of different food and drink, as represented in the Eatwell Guide and be able to apply these principles when planning and cooking dishes;</p>	<p>I can give examples of some food that is grown (such as pears, wheat and potatoes), reared (such as poultry and cattle) and caught (such as fish) in the UK, Europe and the wider world;</p> <p>I can explain and give examples of food that is grown (such as pears, wheat and potatoes), reared (such as poultry and cattle) and caught (such as fish) in the UK, Europe and the wider world;</p> <p>I understand about seasonality, know how this may affect food availability and plan recipes according to seasonality;</p> <p>I understand about seasonality, know how this may affect food availability and plan recipes according to seasonality;</p> <p>I understand that food is processed into ingredients that can be eaten or used in cooking;</p> <p>I understand that food is processed into ingredients that can be eaten or used in cooking;</p> <p>I can demonstrate how to prepare and cook a variety of savoury dishes safely and hygienically;</p> <p>I can demonstrate how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source;</p> <p>I can demonstrate how to use a range of cooking techniques, such as griddling, grilling, frying and boiling;</p>

			<p>I understand that nutritious food and drink are needed to keep the body healthy I understand that to be active and healthy, nutritious food and drink are needed to provide energy for the body;</p> <p>I can select the tools and equipment suitable for the task I can prepare ingredients using appropriate cooking utensils;</p> <p>I can weigh ingredients to an appropriate level of accuracy with support I can measure and weigh ingredients to the nearest gram and millilitre;</p> <p>I can follow a recipe with some support I can start to independently follow a recipe;</p> <p>I am starting to understand seasonality. I understand seasonality.</p>	<p>I can demonstrate how to use a range of cooking techniques, such as griddling, grilling, frying and boiling safely and with confidence.</p> <p>I can explain that foods contain different substances, such as protein, that know that these are needed for our health and can identify these substances in a range of dishes. I can explain that foods contain different substances, such as protein, that are needed for health and be able to apply these principles when planning and preparing dishes;</p> <p>I can adapt a recipe by adding or substituting an ingredient. I can adapt and refine recipes by adding or substituting one or more ingredients to change the appearance, taste, texture and aroma;</p> <p>I can with support alter methods, cooking times and/or temperatures; I can alter methods, cooking times and/or temperatures;</p> <p>I can measure accurately I can measure accurately and calculate ratios of ingredients to scale up or down from a recipe;</p> <p>I can follow a simple recipe. I can independently follow a recipe.</p>
Vocabulary	Join Label Decorate	Design Structure Material Equipment Evaluate Construct Investigate	Identify Resource Outcome Refine Assemble Reinforce Disassemble	Category Precise Dynamic Uniform Qualitative Critical Prototype

		Mechanism Properties Function Method Template Technique Sequence Strengthen	Alternative Communicate Project Guideline Specification Prototype Research Analyse	Economy Sustainable Environment Proportion Input Innovate Fluctuate virtual
Aspirational	Across school career aspirations: Designers, inventors, nutritionists, chefs, farmers, textile workers			
Global Citizenship		Where food comes from	Where food is produced	How food is produced globally Cultural differences in food
Health and Wellbeing	Healthy Diet	Eatwell plate Food hygiene	Eat well plate Processed Food Healthy Diet	Effects of different food types on the body