

Concept	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Designing, making and evaluating	<ul style="list-style-type: none"> *To recognise a range of technology is used in places such as homes and schools. *Select and use technology for a particular purpose. *Exploring and using media and materials. *Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function being imaginative. Use what they have learnt about media and materials in original ways, thinking about uses and purposes. *Represent their own ideas, thoughts and feelings through design and technology. * Understand the importance of a healthy diet. *Talk about ways to keep healthy and safe. 	<ul style="list-style-type: none"> *Develop the creative, technical and practical expertise needed to perform everyday tasks and to participate in an increasingly technological world. *Build and apply a repertoire of knowledge, understanding most skills in order to design and make quality prototypes and products for a wide range of users. *Critique, evaluate and test their ideas and products. *Apply the principles of nutrition and learn how to cook. 	<ul style="list-style-type: none"> *Develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world. *Build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users. *Critique, evaluate and test their ideas and products and the work of others. *Apply the principles of nutrition and learn how to cook. 	<p>Design</p> <ul style="list-style-type: none"> *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, construction kits. * Compile a class design specification to aid a quality outcome. <p>Make</p> <ul style="list-style-type: none"> *Select from and use a range of tools and equipment to perform practical tasks. *Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics. <p>Evaluate</p> <ul style="list-style-type: none"> *Explore and evaluate a range of existing products using pictures and labels. *Evaluate their ideas and products against design criteria and specification. 	<p>Design</p> <ul style="list-style-type: none"> *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 IT. * Write a specification to aid a quality outcome (based on example shown). <p>Make</p> <ul style="list-style-type: none"> *Select from and use a range of tools and equipment to perform practical tasks. *Select from and use a wide range of materials and components, including construction materials, textiles and ingredients-explain their choices. <p>Evaluate</p> <ul style="list-style-type: none"> *Explore and evaluate a range of existing products using pictures and labels. *Evaluate their ideas and products against design criteria and specification. 	<p>Design</p> <ul style="list-style-type: none"> *Gather information about the needs and wants of particular individuals and groups. *Use research and develop design criteria to inform the design of, 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, prototypes, pattern pieces and computer-aided design. <p>Make</p> <ul style="list-style-type: none"> *Elect from and use a wider range of tools and equipment to perform practical tasks [for example, 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 <p>Evaluate</p> <ul style="list-style-type: none"> *Investigate and analyse a range of existing products. *Evaluate their ideas and products against their own design criteria/specification and consider the views of others to improve their work. 	<p>Design</p> <ul style="list-style-type: none"> *Gather information about the needs and wants of particular individuals and groups. *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. <p>Make</p> <ul style="list-style-type: none"> *Elect from and use a wider range of tools and equipment to perform practical tasks [for example, 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 <p>Evaluate</p> <ul style="list-style-type: none"> *Investigate and analyse a range of existing products. *Evaluate their ideas and products against their own design criteria/specification and consider the views of others to improve their work.
Developing, planning and communicating ideas.	<ul style="list-style-type: none"> *Explain what they are making and which materials they are using. * Select materials from a limited range that will meet a simple design criteria e.g. shiny. *Select and name the tools needed to work the materials e.g. scissors for paper. * Explore ideas by rearranging materials. * Describe simple models or drawings of ideas and intentions. *Discuss their work as it progresses. 	<ul style="list-style-type: none"> *Draw on their own experience to help generate ideas. * Use knowledge of existing products to suggest ideas. * Identify a target group for what they intend to design and make. * Model their ideas in card and paper (mock-up/paper pattern) *Develop their design ideas (in theme/design booklets) applying findings from their earlier research. 	<ul style="list-style-type: none"> *Generate ideas by drawing on their own and other people's experiences. *Develop their design ideas through analysis, research, discussion, observation, drawing and modelling. * Identify a purpose for what they intend to design and make. *Identify simple design criteria. *Make simple drawings and label parts. 	<ul style="list-style-type: none"> *Generate ideas for an item, considering its purpose and the user/s. * Identify a purpose and establish a design specification for a successful product. *Plan the order of their work before starting by writing instructions/step by step plan. *Explore, develop and communicate design proposals by modelling ideas. * Make drawings with labels when designing. *Describe the purpose of their products. *Investigate and analyse whether products can be recycled or reused. 	<ul style="list-style-type: none"> *Generate ideas, considering the purposes for which they are designing. *Make labelled drawings from different views showing specific features. *Write a step by step plan. *Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making, if the first attempts fail. *Evaluate products and identify criteria that can be used for their own designs. *Describe the purpose of their products. *Indicate the design features of their products that will appeal to intended users. *Investigate and analyse whether products can be recycled or reused. 	<ul style="list-style-type: none"> *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 suggesting alternative methods of making if the first attempts fail. *Write a step by step plan. *Use results of investigations, information sources, including ICT when developing design ideas. *Work within a range of contexts, such as the home, school, leisure, culture, enterprise, industry and the wider environment. *Describe the purpose of their products. *Indicate the design features of their products that will appeal to intended users. *Explain how particular parts of their products work. *Develop a design specification. *Explore, develop and communicate aspects of their design proposals by modelling their ideas in a variety of ways. *Plan the order of their work (a set of written instructions or step by step plan), choosing appropriate materials, tools and techniques. *Investigate and analyse how much products cost to make. 	<ul style="list-style-type: none"> *Communicate their ideas through detailed labelled drawings. *Work confidently within a range of contexts, such as the home, school, leisure, culture, enterprise, industry and the wider environment. *Describe the purpose of their products. *Indicate the design features of their products that will appeal to intended users *Explain how particular parts of their products work. *Develop a design specification. *Explore, develop and communicate aspects of their design proposals by modelling their ideas in a variety of ways. *Plan the order of their work (a set of written instructions or step by step plan), choosing appropriate materials, tools and techniques. *Investigate and analyse how much products cost to make.

<p>Working with tools, equipment, materials and components to make quality products.</p>	<p>*Begin to create their design using basic techniques. *Start to build structures, joining components together. *Use technical vocabulary when appropriate. *Begin to use scissors to cut straight and curved edges and hole pinches to punch holes. *Use adhesives to join material (flour and water, PVA, glue sticks).</p>	<p>*Make their design using appropriate techniques. *With help measure, mark out, cut and shape a range of materials. * Use squared paper to make a paper pattern/template. *Use tools eg fabric scissors, sewing needles and a hole punch safely. *Assemble, join and combine materials and components together using a variety of temporary methods e.g. sew or glue. *Use simple finishing techniques to improve the appearance of their product e.g. cross stitch or paint.</p>	<p>*Begin to select tools and materials; use vocab' to name and describe them. *Measure, cut and score with some accuracy. *Use hand tools safely and appropriately. *Assemble, join and combine materials in order to make a product. Cut, shape and join fabric to make a simple Keyring. * Use basic sewing techniques *Choose and use appropriate finishing techniques.</p>	<p>*Select tools and techniques for making their product. *Measure, mark out, cut, score and assemble components with more accuracy. *Work safely and accurately with a range of simple tools. *Think about their ideas as they make progress and be willing change things if this helps them improve their work. *Measure, tape or pin, cut and join fabric with some accuracy. *Use finishing techniques strengthen and improve the appearance of their product using a range of equipment.</p>	<p>*Select appropriate tools and techniques for making their product. *Measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques. *Join and combine materials and components accurately in temporary and permanent ways. *Sew using a range of different stitches and weave. *Measure, tape or pin, cut and join fabric with some accuracy.</p>	<p>*Select appropriate materials, tools and techniques. *Measure and mark out accurately *Use a variety of skills using different tools and equipment safely and accurately. *Cut and join with accuracy to ensure a good-quality finish to the product.</p>	<p>*Select appropriate tools, materials, components and techniques. *Assemble components make working models. *Use tools safely and accurately Construct products using permanent joining techniques. *Make modifications as they go along. * Pin, sew and stitch materials together create a product. *Achieve a quality product.</p>
<p>Evaluating processes and products</p>	<p>*Say what they like and do not like about items they have made and attempt to say why. *Begin to talk about their designs as they develop and identify good and bad points. *Start to talk about changes made during the making process. *Discuss how closely their finished products meet their design criteria.</p>	<p>*Evaluate existing products: <ul style="list-style-type: none"> • what products are • who products are for • what products are for • how products work • how products are used • where products might be used • what materials products are made from • what they like and dislike about products <p>*Evaluate their product by discussing how well it works in relation to the purpose. *Evaluate their products as they are developed, identifying strengths and possible changes they might make. *Evaluate their product by asking questions about what they have made and how they have gone about it.</p> </p>	<p>*Evaluate existing products: <ul style="list-style-type: none"> • what products are • who products are for • what products are for • how products work • how products are used • where products might be used • what materials products are made from • what they like and dislike about products <p>*Evaluate against their design criteria. *Evaluate their products as they are developed, identifying strengths and possible changes they might make. *Talk about their ideas, saying what they like and dislike about them.</p> </p>	<p>*Evaluate their product against original design criteria e.g. how well it meets its intended purpose. * Disassemble and evaluate familiar product.</p>	<p>*Evaluate their work both during and at the end of the assignment *Evaluate their products carrying out appropriate tests.</p>	<p>*Evaluate a product against the original design specification. * Evaluate it personally and seek evaluation from others.</p>	<p>*Evaluate their products, identifying strengths and areas for development, and carrying out appropriate tests. *Record their evaluations using drawings with labels. *Evaluate against their original criteria and suggest ways that their product could be improved.</p>
<p>Food and nutrition</p>	<p>*Begin to develop a food vocabulary using taste, smell, texture and feel. *Explore familiar food products e.g. fruit and vegetables. *Stir, spread, knead and shape a range of food and ingredients. *Begin to work safely and hygienically. *Start to think about the need for a variety of foods in a diet. *Measure and weigh food items, non-statutory measures e.g. spoons, cups.</p>	<p>*Begin to understand that all food comes from plants or animals. *Explore common food sources. *Start to understand how to name and sort foods into the five groups e.g. carbs,protein etc. *Know that everyone should eat at least five portions of fruit and vegetables every day. *Know how to prepare simple dishes safely and hygienically, without using a heat source. *Know how to use techniques such as cutting, peeling and grating. *Measure and weigh food items using non-standard measures.</p>	<p>*Understand that all food comes from plants or animals. * Develop understanding of where different foods come from *Understand how to name and sort foods into the five groups e.g. The Eatwell Plate. *Know that everyone should eat at least five portions of fruit and vegetables every day. *Recognise the need for a variety of food in a diet. *Demonstrate how to prepare simple dishes safely and hygienically, without using a heat source. *Demonstrate how to use techniques such as cutting, peeling and grating. *Make dishes from other countries.</p>	<p>*Start to know that food is grown, reared and caught in the UK, Europe and the wider world. *Understand how to prepare and cook a variety of dishes including experience of using a heat source. * Begin to understand how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking. *Know how a healthy diet is made up from a variety and balance of different food and drink. *Begin to know that to be active and healthy, food and drink are needed to provide energy for the body.</p>	<p>*Understand that food is grown, reared and caught in the UK, Europe and the wider world. *Understand how to prepare and cook a variety of predominantly savoury dishes including experience of using a heat source. *Know how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking. *Measure and weigh ingredients appropriately. *Explain why a healthy diet is important. *Know that to be active and healthy, food and drink are needed to provide energy for the body and identify healthy high energy foods. *Understand what to do to be hygienic and safe.</p>	<p>*Understand that food is grown, reared and caught in the UK, Europe and the wider world. *Begin to understand that seasons may affect the food available. Understand how food is processed into ingredients that can be eaten or used in cooking. *Know how to prepare and cook a variety of predominantly savoury dishes including the use of a heat source. *Demonstrate increasing confidence in how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking. *Evaluate a meal and consider if they contribute towards a balanced diet. *Begin to understand that different food and drink contain different substances that are needed for health. *Explain what times of year particular foods are eaten in. *Describe what to do to be hygienic and safe. *Use appropriate tools and equipment, weighing and measuring with scales.</p>	<p>*Explain how ingredients are grown, reared and caught. *Understand that seasons may affect the food available. *Explain how food is processed into ingredients that can be eaten or used in cooking. *Know how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including the use of a heat source. * Understand how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking. *Know different food and drink contain different substances that are needed for health. *Use appropriate tools and equipment, weighing and measuring with scales. *Plan a healthy and affordable diet.</p>



Technical knowledge	*Provide a range of materials and objects to play with that work in different ways for different purposes, for example, egg whisk, torch, other household implements, pulleys, construction kits and ipad. * Provide a range of programmable toys, as well as equipment involving ICT, such as computers.	*build structures, exploring how they can be made stronger, stiffer and more stable e.g Bridges	*Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products *That a 3-D textiles product can be assembled from two identical fabric shapes.	*Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.	*Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors].	*Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]	*Apply their understanding of computing to program, monitor and control their products.
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