



Design

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p>*have own ideas</p> <p>* explain what I want to do</p> <p>*explain what my product is for, and how it will work</p> <p>* use pictures and words to plan, begin to use models</p>	<ul style="list-style-type: none"> • 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 • Develop their design ideas 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 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 criteria for a successful product • Plan the order of their work before starting • Explore, develop and communicate design proposals by modelling ideas • Make drawings with labels when designing 	<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 • Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggest alternative methods of making, if the first attempts fail • Evaluate products and identify criteria that can be used for their own designs 	<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 • Use results of investigations, information sources, including ICT when developing design ideas 	<ul style="list-style-type: none"> • 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 • Plan the order of their work, choosing appropriate materials, tools and techniques



Make

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p>*talk about what I'm making</p> <p>*think about what I need to do next</p> <p>*use tools/equipment to cut, shape, join, finish and explain choices</p> <p>*With support, measure, mark out, cut and shape</p> <p>*choose suitable materials</p>	<ul style="list-style-type: none"> • Make their design using appropriate techniques • With help measure, mark out, cut and shape a range of materials • Use tools eg scissors and a hole punch safely • Assemble, join and combine materials and components together using a variety of temporary methods e.g. glues or masking tape • Select and use appropriate fruit and vegetables, processes and tools • Use basic food handling, hygienic practices and personal hygiene • Use simple finishing techniques to improve the appearance of their product 	<ul style="list-style-type: none"> • Begin to select tools and materials; use vocabulary 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 garment. Use basic sewing techniques • Follow safe procedures for food safety and hygiene • Choose and use appropriate finishing techniques 	<ul style="list-style-type: none"> • 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 • Demonstrate hygienic food preparation and storage • Use finishing techniques to strengthen and improve the appearance of their product using a range of equipment including ICT 	<ul style="list-style-type: none"> • 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 - weave and knit • Measure, tape or pin, cut and join fabric with some accuracy • Use simple graphical communication techniques 	<ul style="list-style-type: none"> • Select appropriate materials, tools and techniques • Measure and mark out accurately • Use skills in using different tools and equipment safely and accurately • Weigh and measure accurately (time, dry ingredients, liquids) • Apply the rules for basic food hygiene and other safe practices e.g. hazards relating to the use of ovens • Cut and join with accuracy to ensure a good-quality finish to the product 	<ul style="list-style-type: none"> • 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 to create a product • Achieve a quality product



Evaluate

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p>*talk about my work, * talk about existing products considering: use, materials, how they work, where they might be used * talk about things that other people have made *begin to talk about what could make product better</p>	<ul style="list-style-type: none"> • 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 answering and asking questions about what they have made and how they have gone about it 	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Evaluate their product against original design criteria e.g. how well it meets its intended purpose • Disassemble and evaluate familiar products 	<ul style="list-style-type: none"> • Evaluate their work both during and at the end of the assignment • Evaluate their products carrying out appropriate tests 	<ul style="list-style-type: none"> • Evaluate a product against the original design specification • Evaluate it personally and seek evaluation from others 	<ul style="list-style-type: none"> • Evaluate their products, carrying out appropriate tests, identifying strengths and areas for development • Record their evaluations using drawings with labels • Evaluate against their original criteria and suggest ways that their product could be improved



Technical Knowledge - Construction

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<ul style="list-style-type: none"> * with support begin to measure and join materials *describe differences in materials *with support begin to use levers or slides 	<ul style="list-style-type: none"> *begin to measure and join materials, with some support *describe differences in materials *suggest ways to make material/product stronger *begin to use levers or slides 	<ul style="list-style-type: none"> *measure materials *describe some different characteristics of materials *join materials in different ways *use joining, rolling or folding to make it stronger *use own ideas to try to make product stronger *use levers or slides *begin to understand how to use wheels and axles 	<ul style="list-style-type: none"> *use appropriate materials *work accurately to make cuts and holes * join materials *begin to make strong structures *select appropriate tools / techniques *alter product after checking, to make it better *begin to try new/different ideas *use simple lever and linkages to create movement *use simple circuit in product *learn about how to program a computer to control product 	<ul style="list-style-type: none"> *measure carefully to avoid mistakes *attempt to make product strong *continue working on product even if original didn't work *make a strong, stiff structure *select most appropriate tools / techniques *explain alterations to product after checking it *grow in confidence about trying new / different ideas. *use levers and linkages to create movement *use pneumatics to create movement *use number of components in circuit *program a computer to control product 	<ul style="list-style-type: none"> *select materials carefully, considering intended use of product and appearance *explain how product meets design criteria *measure accurately enough to ensure precision *ensure product is strong and fit for purpose *begin to reinforce and strengthen a 3D structure *refine product after testing *grow in confidence about trying new / different ideas *begin to use cams, pulleys or gears to create movement *incorporate switch into product *confidently use number of components in circuit *begin to be able to program a computer to monitor changes in environment and control product 	<ul style="list-style-type: none"> *select materials carefully, considering intended use of the product, the aesthetics and functionality. *explain how product meets design criteria * reinforce and strengthen a 3D structure or product *refine product after testing, considering aesthetics, functionality and purpose *incorporate hydraulics and pneumatics *be confident to try new / different ideas *use cams, pulleys and gears to create movement *use different types of circuit in product * think of ways in which adding a circuit would improve product * program a computer to monitor changes in environment and control product



Technical Knowledge - Textiles

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p>* with support, measure, cut and join textiles to make a product. *choose suitable textiles</p>	<p>*measure, cut and join textiles to make a product, with some support *choose suitable textiles</p>	<p>*measure textiles *join textiles together to make a product, and explain how I did it *carefully cut textiles to produce accurate pieces *explain choices of textile *understand that a 3D textile structure can be made from two identical fabric shapes.</p>	<p>*join different textiles in different ways *choose textiles considering appearance and functionality *begin to understand that a simple fabric shape can be used to make a 3D textiles project</p>	<p>*think about user when choosing textiles *think about how to make product strong * begin to devise a template *explain how to join things in a different way *understand that a simple fabric shape can be used to make a 3D textiles project</p>	<p>*think about user and aesthetics when choosing textiles *use own template * think about how to make product strong and look better *think of a range of ways to join things *begin to understand that a single 3D textiles project can be made from a combination of fabric shapes.</p>	<p>*think about user's wants/needs and aesthetics when choosing textiles *make product attractive and strong *make a prototype *use a range of joining techniques *think about how product might be sold *think carefully about what would improve product *understand that a single 3D textiles project can be made from a combination of fabric shapes.</p>



Technical Knowledge – Food, Drink and Nutrition

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p>*describe textures *wash hands & clean surfaces *talk about interesting ways to decorate food *talk about where some foods come from, (i.e. plant or animal) *talk about differences between some food groups (i.e. sweet, vegetable etc.) *talk about how fruit and vegetables are healthy *with support, cut, peel and grate safely,</p>	<p>describe textures *wash hands & clean surfaces *think of interesting ways to decorate food *say where some foods come from, (i.e. plant or animal) *describe differences between some food groups (i.e. sweet, vegetable etc.) *discuss how fruit and vegetables are healthy *cut, peel and grate safely, with support</p>	<p>*explain hygiene and keep a hygienic kitchen *describe properties of ingredients and importance of varied diet *say where food comes from (animal, underground etc.) *describe how food is farmed, home-grown, caught *draw eat well plate; explain there are groups of food *describe “five a day” *cut, peel and grate with increasing confidence</p>	<p>*carefully select ingredients *use equipment safely *make product look attractive *think about how to grow plants to use in cooking *begin to understand food comes from UK and wider world *describe how healthy diet= variety/balance of food/drinks *explain how food and drink are needed for active/healthy bodies. *prepare hot drinks safely and hygienically *grow in confidence understanding branding of food and drink products</p>	<p>*explain how to be safe/hygienic *think about presenting product in interesting/ attractive ways *understand ingredients can be fresh, pre-cooked or processed *begin to understand about food being grown, reared or caught in the UK or wider world *describe eat well plate and how a healthy diet=variety / balance of food and drinks *explain importance of food and drink for active, healthy bodies *prepare and cook some dishes safely and hygienically *use some of the following techniques: peeling, chopping, slicing, grating, mixing, spreading and baking</p>	<p>*explain how to be safe / hygienic and follow own guidelines *present product well - interesting, attractive, fit for purpose *begin to understand seasonality of foods *understand food can be grown, reared or caught in the UK and the wider world *describe how recipes can be adapted to change appearance, taste, texture, aroma *explain how there are different substances in food / drink needed for health *prepare and cook some savoury dishes safely and hygienically including, where appropriate, use of heat source * use range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking.</p>	<p>*understand a recipe can be adapted by adding / substituting *explain seasonality *present product to a high standard to make the product interesting and aesthetically attractive *learn about food processing methods *name some types of food that are grown, reared or caught in the UK or wider world *adapt recipes to change appearance, taste, texture or aroma. *describe different substances in food and drink, and how they can affect health *prepare and cook a variety of dishes safely and hygienically including, where appropriate, the use of heat source. *use a range of techniques confidently such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking.</p>