

Progression of Skills Document Design Technology

Key Skills and Concepts	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Food Preparation and Nutrition	<p>Mix and pour measured ingredients together.</p> <p>Start to think about eating healthily and how we can choose healthy food.</p> <p>Discuss how to make an activity safe and hygienic.</p>	<p>Cut ingredients safely and hygienically.</p> <p>Measure or weigh using measuring cups.</p> <p>Assemble or cook ingredients.</p> <p>Know that we should eat 5 portions of fruits and vegetables a day.</p> <p>Say whether foods come from a plant or an animal.</p> <p>Cut, peel and grate safely and with support.</p> <p>Describe textures.</p>	<p>Cut, peel or grate ingredients safely and hygienically, and with increasing confidence.</p> <p>Measure or weigh using electronic scales.</p> <p>Understand how to sort foods into the five groups in the 'Eat Well Plate'.</p> <p>Describe how food is farmed, home-grown or caught.</p> <p>Describe properties of ingredients.</p>	<p>Prepare ingredients to cook a variety of predominantly savoury dishes safely and hygienically, using appropriate utensils.</p> <p>Measure ingredients to the nearest gram.</p> <p>Follow a recipe.</p> <p>Make the product look attractive.</p> <p>Understand how to use a range of techniques such as peeling, slicing, grating, mixing, spreading, kneading and baking.</p> <p>Begin to know that food and drink are needed to provide energy for the body.</p> <p>Understand that a varied diet is healthy.</p> <p>Understand that food can be produced in UK and wider world.</p>	<p>Select appropriate utensils to prepare a variety of predominantly savoury dishes.</p> <p>Control the temperature of the oven or hob.</p> <p>Understand and consolidate cooking techniques from Year 3.</p> <p>Understand that to be active and healthy we need food and drink.</p> <p>Explain how to be safe and hygienic.</p> <p>Describe the eat-well plate and how to eat a healthy, balanced diet.</p> <p>Think about presenting product in interesting and attractive ways.</p>	<p>Understand the importance of correct storage and handling of ingredients, using knowledge of micro-organisms.</p> <p>Create and refine recipes, including ingredients, method, cooking time and temperature.</p> <p>Begin to understand that seasons may affect the food available.</p> <p>Describe how recipes can be adapted to change appearance, taste, texture and aroma.</p> <p>Present product well – interesting, attractive and fit for purpose.</p> <p>Explain how there are different substances in food needed for health.</p>	<p>Calculate ratios of ingredients to scale up or down from a recipe.</p> <p>Understand a recipe can be adapted by adding/substituting ingredients.</p> <p>Use a heat source where appropriate.</p> <p>Describe some of the substances in food and drink and how they can effect health.</p> <p>Understand that seasons may affect the food available and that eating locally produced food, with fewer food miles, will be beneficial to the environment.</p> <p>Name some foods that are grown in the UK or wider world.</p>

<p>Using Materials</p>	<p>Improve cutting skills with regular opportunities for using scissors and plastic knives for playdough</p>	<p>Cut materials using tools provided. Measure and mark out to the nearest centimetre.</p>	<p>Demonstrate a range of cutting and shaping techniques eg tearing, cutting, folding and curling. Demonstrate a range of joining techniques eg using glue, hinging or combining materials to strengthen</p>	<p>Cut materials accurately and safely by selecting appropriate tools. Measure and mark out to the nearest millimetre.</p>	<p>Apply appropriate cutting and shaping techniques that include cuts within perimeter of objects such as slots or cut outs. Select appropriate joining techniques.</p>	<p>Cut materials with precision and refine the finish with appropriate tools eg sanding wood after cutting.</p>	<p>Understand the qualities of materials to choose appropriate tools to cut and shape eg some fabric may need sharper scissors, choosing an appropriate tool to cut wood.</p>
<p>Using Textiles</p>	<p>Glue fabric shapes together.</p>	<p>Use templates to make a textile shape. Join textiles using a running stitch. Measure, cut and join textiles with some support.</p>	<p>Colour and decorate textiles using dyeing, adding sequins or printing. Measure, cut and join textiles and explain how you did it.</p>	<p>Understand that space should be left to make a seam. Join textiles in different ways. Choose textiles considering appearance and functionality.</p>	<p>Join textiles with appropriate stitching. Select the most appropriate techniques to decorate textiles. Begin to devise own template.</p>	<p>Create objects that need a seam allowance eg a cushion. Join textiles with a variety of stitching techniques eg back stich for seams and running stitch to add decoration. Use own template.</p>	<p>Choose from a variety of appropriate stitches for joining and decoration. Use the qualities of materials to create suitable visual and tactile effects when decorating textiles. eg soft decorations for a cushion, shiny sequins for a Christmas decoration. Make a prototype. Think about how a product might be sold.</p>

Electricals, electronics and computing	Use Bebots for programming and look and talk about how different objects work.	Diagnose faults in battery operated devices eg low battery, water and battery terminal damage	Model designs using a computer or other devices.	Create simple circuits for a device or object. Learn about how to program a computer to control product.	Create circuits for a device or object with increasing confidence. Use a number of components in a circuit. Begin to program a computer to control and monitor product.	Create parallel circuits using electronics kits with a number of components eg LEDs, resistors, transistors and chips. Incorporate a switch. Program a computer to monitor changes and control product.	Write a code to control a model. Use different types of circuit in a product. Think of ways in which adding a circuit could improve product. Program a computer to monitor changes and control product.
Construction and mechanics	Use glue to make objects, junk modelling, building with bricks.	Use materials to practise drilling, screwing, gluing and nailing materials to make and strengthen products.	Create products using wheels and winding mechanisms.	Choose suitable techniques to construct products or to repair items. Strengthen materials using suitable techniques.	Use scientific knowledge of transference of forces to choose appropriate mechanisms eg levers	Develop a range of practical skills to create products eg cutting, drilling and screwing, nailing, gluing, filing and sanding.	Convert rotary motion to linear using cams. Use innovative combinations of electronics (or computing) and mechanics in product designs.
Design, make, evaluate and improve	Discuss how to make simple products and who could use them. Make simple products. Talk about how good you think your product is.	Design products with a clear purpose and intended user. Make products, refining the design as work progresses.	Continue to use skills from Year 1 with increasing confidence. Use software to design.	Design with a purpose. Work efficiently by carefully selecting materials.	Refine work and techniques as work progresses, continually evaluating design. Use software to design and represent designs.	Design with the user in mind and the service a product gives (not just profit). Make a prototype. Ensure products have a high quality finish, using art skills where appropriate.	Make stages of prototypes, making continual refinements. Use cross-sectional diagrams and computer-aided designs to represent designs.

<p>Take inspiration from design throughout history</p>	<p>Talk about different objects and what you like and dislike.</p>	<p>Explore objects, identifying likes and dislikes. Explore how objects have been created.</p>	<p>Suggest improvements to existing designs and objects. Continue to explore and research how different objects have been created.</p>	<p>Identify some of the great designers, including pioneers in horticultural techniques, to help generate ideas for design.</p>	<p>Improve upon existing designs, giving reasons for changes. Disassemble products to understand how they work.</p>	<p>Combine elements of design from a range of inspirational designers throughout history, giving reasons for choices.</p>	<p>Create innovative designs that improve upon existing products. Use evaluations of existing products to help suggest improvements for user.</p>