

Year 4- Design and Technology



Year 3	
<p><u>Progression of Skills and Understandings</u> Designing</p>	<ul style="list-style-type: none"> ⦿ 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. ⦿ Begin to use research and given design criteria to design useful, practical and appealing products for a particular audience. ⦿ Begin to generate, develop, model and communicate their ideas through discussion, annotated sketches and prototypes. ⦿ Be introduced to computer-aided design.
<p><u>Progression of Skills and Understandings</u></p>	<p><u>Making:</u></p> <ul style="list-style-type: none"> ⦿ Select 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
	<ul style="list-style-type: none"> ⦿ Evaluate their ideas and products against the design criteria.
<p><u>Progression of Skills and Understandings</u> Cooking and Nutrition</p>	<ul style="list-style-type: none"> ⦿ 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. ⦿ Explore the need for a healthy diet and which types of food and drink this includes ⦿ Understand different cooking techniques and how this impacts on the healthiness of the food, e.g. frying, grilling, boiling, etc. ⦿ Suggest a menu which involves healthy foods and healthy cooking techniques, e.g. boiled or baked potatoes rather than chips, grilled sausages rather than fried, etc. ⦿ Understand where food comes from and how some foods travel, for example bananas and tea.
<p><u>Making and Technological Knowledge</u></p>	<p>and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities</p> <p><u>Technical Knowledge</u></p> <ul style="list-style-type: none"> ⦿ Apply their understanding of how to strengthen, stiffen and reinforce more complex structures. ⦿ Understand, and use, mechanical systems in their products for example; gears, pulleys, cams, levers and linkages. ⦿ Understand, and use, electrical systems in their products for example; series circuits incorporating switches, bulbs, buzzers and motors.
<p><u>Progression of Skills and Understandings</u> <u>Making and Technological Knowledge</u> <u>Materials and Components</u></p>	<ul style="list-style-type: none"> ⦿ Cut slots. ⦿ Use other types of linkages such as reverse or parallel ⦿ Explore, deconstruct and recreate more complex pop-ups. ⦿ Explore nets of products. ⦿ Measure and mark out accurately.
<p><u>Progression of Skills and Understandings</u> <u>Making and Technological Knowledge</u> <u>Construction Materials</u></p>	<ul style="list-style-type: none"> ⦿ Drill, screw, cut and nail safely. ⦿ Use a glue gun with close supervision. ⦿ Create simple, stable structures. ⦿ Strengthen frames with diagonal struts. ⦿ Choose tools to complete a variety of tasks e.g. cutting, finishing, shaping and joining. ⦿ Begin to select materials and components according to how they meet the need of the design.
<p><u>Progression of Skills and Understandings</u> <u>Making and Technological Knowledge</u> <u>Textiles</u></p>	<ul style="list-style-type: none"> ⦿ Join textiles using a range of stitches, e.g. running stitch, oversewing, back stitch ⦿ Extend the range of textile embellishment used, e.g. using appliqué, adding trim or embroidery. ⦿ Explore ready-made fastenings that are used on a variety of products. ⦿ Use ready-made fastenings, e.g. buttons on their product. ⦿ Create test designs (prototypes) using simple materials such as J cloths or material scraps.
<p><u>Progression of Skills and Understandings</u> <u>Evaluating</u></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 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. ⦿ Investigate and analyse a range of existing products against the intended design criteria.

Cooking and Nutrition

- « Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.
- « Use knowledge of a balanced diet to make healthy eating choices.
- « Begin to understand the importance of safe food handling and storage.
- « Follow a recipe to produce a savoury dish.
- « Create our simple recipe of a healthy, savoury dish.
- « Understand food seasonality and can talk about what is produced locally.