



Coupe Green Primary School

Design Technology Progression Map



Intent - At Coupe Green, our aim is to provide a design technology curriculum which inspires, engages and challenges pupils in all aspects of design technology and allows them to use a wide range of resources confidently. We want children to thrive in all areas of design technology, using their creativity and imagination to design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values.

Year Group	Knowledge	Skills	Vocabulary
EYFS	<p><u>Preschool</u></p> <ul style="list-style-type: none"> - To explore different material freely, to develop their own ideas about how to use them and what to make. - To be able to join materials. - To share their creations, explaining the process they have used. - To return to and build on their previous learning, through play, such as construction. 		<p>construction materials tools</p> <p>design texture</p>
Year 1 <i>Structures</i>	<p><u>Design:</u></p> <ul style="list-style-type: none"> - To understand what a design is. - To understand what a mock-up is and why we need to use one. <p><u>Make:</u></p> <ul style="list-style-type: none"> - To know a range of materials and talk about what they are used for. - To know what tools are appropriate to use for my idea. <p><u>Evaluate:</u></p> <ul style="list-style-type: none"> - To know the importance of evaluating a product. 	<p><u>Design:</u></p> <ul style="list-style-type: none"> - To make a mock-up to trial my ideas. - To talk about my ideas with others. <p><u>Make:</u></p> <ul style="list-style-type: none"> - To select from a wide range of materials. - To name the different tools I am using. <p><u>Evaluate:</u></p> <ul style="list-style-type: none"> - To explore existing products and talk about how they have been made. - To talk about my final product, linking back to my design, <p><u>Technical knowledge:</u></p> <ul style="list-style-type: none"> - To build a simple structure, making it stronger and more stable. 	<p>hygiene chop cut ingredients evaluate process structures strengthen stable mock-up design materials tools</p>

	<p><u>Technical knowledge:</u></p> <ul style="list-style-type: none"> - To know ways to make structures stronger and more stable. <p><u>Cooking:</u></p> <ul style="list-style-type: none"> - To know about foods needed for a varied diet. 	<p><u>Cooking:</u></p> <ul style="list-style-type: none"> - To cut and chop ingredients. - To work safely and hygienically. 	
<p>Year 2</p> <p><i>Moving Vehicles</i></p>	<p><u>Design:</u></p> <ul style="list-style-type: none"> - To know what design criteria are. - To know why labelling sketches is important. <p><u>Make:</u></p> <ul style="list-style-type: none"> - To know joining techniques and when they are suitable (glue, stick, tie, tape, pin, and fold). - To know what wheels, chassis and axles are and how they work. <p><u>Technical knowledge:</u></p> <ul style="list-style-type: none"> - To know the correct names for tools and materials. <p><u>Cooking:</u></p> <ul style="list-style-type: none"> - To know the difference between fruit and vegetables. - To know where food comes from. 	<p><u>Design:</u></p> <ul style="list-style-type: none"> - To create design criteria. - To suggest more than one idea to suit design criteria. - To create labelled drawings to show what I want to make. - To talk about my designs using ICT (where appropriate). <p><u>Make:</u></p> <ul style="list-style-type: none"> - To select the most appropriate tools and materials for a task. - To cut around shapes after drawing around a template. - To join materials using different techniques (glue, stick, tie, tape, pin, fold etc). - To attach wheels to a chassis using an axle. <p><u>Evaluate:</u></p> <ul style="list-style-type: none"> - To evaluate existing products against design criteria. - To evaluate my own products against design criteria. <p><u>Technical knowledge:</u></p> <ul style="list-style-type: none"> - To use correct technical vocabulary when talking about my work. - To explore a range of different mechanisms (levers, sliders, wheels, axles). <p><u>Cooking:</u></p> <ul style="list-style-type: none"> - To decide whether I need to cut, peel, chop and grate ingredients. 	<p>design design criteria template</p> <p>materials such as wood, paper, fabric, metal.</p> <p>properties such as waterproof, flexible, bendy.</p> <p>wheels axle chassis</p> <p>cut peel grate chop</p>
<p>Year 3</p> <p><i>Textiles</i></p>	<p><u>Design:</u></p> <ul style="list-style-type: none"> - To discuss the positive and negatives of a design, <p><u>Make:</u></p> <ul style="list-style-type: none"> - To know which tools are used to cut, shape, join and finish. <p><u>Evaluate:</u></p> <ul style="list-style-type: none"> - To suggest how an existing product could be improved. <p><u>Technical knowledge (in relation to textiles):</u></p> <ul style="list-style-type: none"> - To know the purpose of a running stitch. - To know the purpose of a back stitch. - To know the advantages and disadvantages of sewing as a form of joining materials. <p><u>Cooking:</u></p>	<p><u>Design:</u></p> <ul style="list-style-type: none"> - To select from a range of existing designs. - To order the sequence of steps needed to make my design. - To suggest ways to test the success of my design. <p><u>Make:</u></p> <ul style="list-style-type: none"> - To use tools accurately e.g. cutting straight along a line. - To use appropriate finishing techniques. - To use measurements for length whilst making my product. - To prepare pattern pieces e.g. paper templates to cut, sew and paint around templates for my design. <p><u>Evaluate:</u></p> <ul style="list-style-type: none"> - To investigate existing products to support planning my ideas. - To evaluate my final product and explain what went well and what could be improved. <p><u>Technical knowledge (in relation to textiles):</u></p> <ul style="list-style-type: none"> - To thread a needle. 	<p>design criteria sequence</p> <p>cut shape join finish</p> <p>accuracy centimetres (cm) millimetres (mm)</p> <p>pattern pieces evaluate</p> <p>running stitch needle</p>

	- To know the names of the 6 food groups.	- To sew in between punched holes on card. - To sew a running stitch onto fabric. - To sew on a button. <u>Cooking:</u> - To follow a simple recipe to create a food dish. - To cut, chop and prepare ingredients for a recipe.	sew back stitch food groups prepare ingredients
Year Group	Knowledge	Skills	Vocabulary
Year 4 <i>Electrical systems</i>	<u>Design:</u> - To independently know the names of materials and tools. - To know the purpose of a prototype. <u>Make:</u> - To know which technique is best for cutting, shaping, joining and finishing and why. <u>Evaluate:</u> - To suggest how my product design could be improved. <u>Technical knowledge (in relation to electrical circuits):</u> - To know how to build a working electrical circuit. - To know the purpose of a switch, bulb, buzzer and motor. <u>Cooking:</u> - To know how ingredients are reared and caught e.g. fish, beef, chicken.	<u>Design:</u> - To draw, design and label each part of my design with instructions. - To use prototypes to improve, test and make changes to my design considering the final appearance. <u>Make:</u> - To carefully check measurements for accuracy. <u>Evaluate:</u> - To give reasons for my final choice of a design, thinking about materials, processes and how easily it can be made. - To suggest improvements once my final design has been made. <u>Technical knowledge (in relation to electrical circuits):</u> - To build a circuit using switches, bulbs, buzzers and motors to be added to my design. - To think about how to safely attach an electrical circuit to a design. <u>Cooking:</u> - To use a range of cooking techniques to prepare a recipe.	prototype appearance pattern pieces accuracy process circuit switch bulb buzzer Motor cooking techniques recipe reared
Year 5 <i>Mechanisms and mechanical systems</i>	<u>Design:</u> - To know the purpose of exploded diagrams. <u>Evaluate:</u> - To understand how key events and individuals changed how specific products are made. - To understand how mechanical systems work e.g. gears, pulleys and leavers. <u>Technical knowledge:</u> - To know the purpose of a CAM, crank handle, frame structure, CAM follower and slider. - To know the different motions CAMs make and how this alters the follower.	<u>Design:</u> - To analyse existing products and create an alternative design. - To sketch design ideas using exploded diagrams. - To use research to develop design criteria as a class. - To use computer aided design (CAD) to show what a product will look like (e.g. Microsoft Paint). <u>Make:</u> - To make prototypes to develop design ideas. - To select from and use a range of cutting and measuring tools. - To choose appropriate materials, considering their properties. <u>Evaluate:</u> - To evaluate others' products against the design criteria, and suggest improvements. <u>Technical knowledge:</u>	mechanical systems pulleys gears leavers analyse sketch exploded diagram computer aided designs (CAD) CAMS crank handle CAM follower eccentric

	<p><u>Cooking:</u> - To know where and how ingredients are grown and processed.</p>	<p>- To select the most appropriate CAM for a design.</p> <p><u>Cooking:</u> - To use a wider range of ingredients. - To create foods for a purpose.</p>	<p>egg-shaped hexagon snail ellipse</p>
<p>Year 6</p> <p><i>Woodwork/ joining</i></p>	<p><u>Design:</u> - To know the purpose of cross-sectional diagrams.</p> <p><u>Make:</u> - To know how to use prior knowledge of cutting tools to cut wood safely and accurately.</p> <p><u>Evaluate:</u> - To talk about key events and individuals who impacted the wider world.</p> <p><u>Technical knowledge (in relation to woodwork):</u> - To understand how to strengthen, stiffen and reinforce structures.</p> <p><u>Cooking:</u> - To understand the nutritional information on food packaging.</p>	<p><u>Design:</u> - To analyse existing products and create an innovative design. - To sketch design ideas using cross sectional diagrams. - To use research to develop my design criteria independently.</p> <p><u>Make:</u> - To make prototypes to refine techniques. - To use a range of tools and materials to build and reinforce structures.</p> <p><u>Evaluate:</u> - To evaluate my prototype against design criteria and make improvements.</p> <p><u>Technical knowledge:</u> - To be able to cut and sand wood safely, choosing appropriate tools. - To be able to create and reinforce a wooden structure for a given purpose.</p> <p><u>Cooking:</u> - To select ingredients applying principles of a healthy and varied diet. - To select techniques required to create a savoury dish of my choice.</p>	<p>accuracy woodwork strengthen stiffen reinforce prototype cross-section innovative nutrition savoury</p>