

Our school provides a foundation for **all to flourish** rooted in the person and work of Jesus;



built upon Christian values encouraging **aspirational achievement**.

*'Everyone then who hears these words of mine and acts on them will be like a wise man who built his house on rock' -
Parable of the Wise and the Foolish Builders from Matthew 7:24-27*

Carleton Endowed CE (VA) Primary School

Whole School Design Technology Progression Map

Our Curricular Goal:

Our goal is for our children to become designers. Designers must have:
Significant levels of originality and the willingness to take creative risks to produce innovative ideas and prototypes.

An excellent attitude to learning and independent working.

The ability to use time efficiently and work constructively and productively with others.

The ability to carry out thorough research, show initiative and ask questions to develop an exceptionally detailed knowledge of users' needs.

The ability to act as responsible designers and makers, working ethically, using finite materials carefully and working safely.

A thorough knowledge of which tools, equipment and materials to use to make their products.

The ability to apply mathematical knowledge.

The ability to manage risks exceptionally well to manufacture products safely and hygienically.

A passion for the subject and knowledge of up-to-date technological innovations in materials, products and systems.?

Design and Technology Rationale

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The teaching of Design and Technology at Carleton Primary School aims to inspire pupils to design and make purposeful products that solve real and relevant problems in a variety of contexts. The Design and Technology curriculum provides pupils with the necessary skills, knowledge and technical vocabulary to successfully complete their learning objectives. Design and Technology fosters an entrepreneurial spirit offering pupils practical knowledge and skills that can be applied in real life contexts throughout their school life and beyond

Component 1: Aspects of Design Technology- Essential Knowledge

Aspects of DT	EYFS Essential Knowledge	Year 1 Essential Knowledge	Year2 Essential Knowledge	Year 3 Essential Knowledge	Year 4 Essential Knowledge	Year 5 Essential Knowledge	Year 6 Essential Knowledge
Food	<ul style="list-style-type: none"> I know how to work safely and hygienically. I know how to use non-statutory measures e.g. spoons/cups. I know how to use some techniques e.g. mix, spread, knead I know about healthy choices in relation to eating 	<ul style="list-style-type: none"> Understand where a range of fruit and vegetables come from e.g. farmed or grown at home. Understand and use basic principles of a healthy and varied diet to prepare dishes, including how fruit and 	<ul style="list-style-type: none"> Understand where a range of fruit and vegetables come from e.g. farmed or grown at home. Understand and use basic principles of a healthy and varied diet to prepare 	<ul style="list-style-type: none"> Know how to use appropriate equipment and utensils to prepare and combine food. Know about a range of fresh and processed ingredients appropriate for their product, and whether 	<ul style="list-style-type: none"> Know how to use appropriate equipment and utensils to prepare and combine food. Know about a range of fresh and processed ingredients appropriate for their product, and whether they are grown, 	<ul style="list-style-type: none"> Know how to use utensils and equipment including heat sources to prepare and cook food. Understand about seasonality in 	<ul style="list-style-type: none"> Know how to use utensils and equipment including heat sources to prepare and cook food. Understand about seasonality in relation to food products and the source of different

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<p>Vocabulary</p>	<ul style="list-style-type: none"> I know about the importance of a healthy diet 	<p>vegetables are part of The eatwell plate.</p> <ul style="list-style-type: none"> Know and use technical and sensory vocabulary relevant to the project. <p>fruit and vegetable names, names of equipment and utensils</p> <p>sensory vocabulary e.g. soft, juicy, crunchy, sweet, sticky, smooth, sharp, crisp, sour,</p>	<p>dishes, including how fruit and vegetables are part of <i>The eatwell plate</i>.</p> <ul style="list-style-type: none"> Know and use technical and sensory vocabulary relevant to the project. <p>fruit and vegetable names, names of equipment and utensils</p> <p>sensory vocabulary e.g. soft, juicy,</p>	<p>they are grown, reared or caught.</p> <ul style="list-style-type: none"> Know and use relevant technical and sensory vocabulary appropriately. <p>name of products,</p>	<p>reared or caught.</p> <ul style="list-style-type: none"> Know and use relevant technical and sensory vocabulary appropriately. <p>name of products, names of equipment, utensils, techniques and ingredients</p> <p>texture, taste, sweet, sour,</p>	<p>relation to food products and the source of different food products.</p> <ul style="list-style-type: none"> Know and use relevant technical and sensory vocab.. <p>ingredients, yeast, dough, bran, flour, wholemeal,</p> <p>unleavened, baking soda, spice, herbs fat, sugar,</p> <p>carbohydrate, protein, vitamins, nutrients, nutrition,</p>	<p>food products.</p> <ul style="list-style-type: none"> Know and use relevant technical and sensory vocabulary
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			crunchy, sweet, sticky, smooth, sharp, crisp, sour,	names of equipment, utensils, techniques and ingredients texture, taste, sweet, sour, hot, spicy, appearance, smell, preference,	hot, spicy, appearance, smell, preference,		ingredients, yeast, dough, bran, flour, wholemeal, unleavened, baking soda, spice, herbs fat, sugar, carbohydrate, protein, vitamins, nutrients, nutrition,
		hard flesh, skin, seed, pip, core, slicing, peeling,	hard flesh, skin, seed, pip, core, slicing, peeling,	greasy, moist, cook, fresh, savoury, hygienic, edible, grown,	greasy, moist, cook, fresh, savoury, hygienic, edible, grown,	healthy, varied, gluten, dairy, allergy	healthy, varied, gluten, dairy, allergy,
		cutting, squeezing, healthy diet, choosing, ingredients,	cutting, squeezing, healthy diet, choosing, ingredients	reared, caught, frozen, tinned, processed, seasonal, harvested healthy/varied diet	reared, caught, frozen, tinned, processed, seasonal, harvested healthy/varied diet	intolerance, savoury, source, seasonality utensils, combine, fold, knead, stir, pour, mix, rubbing in, whisk, beat, roll out, shape, sprinkle, crumble	intolerance, savoury, source, seasonality utensils, combine, fold, knead, stir, pour, mix, rubbing in, whisk, beat, roll out, shape, sprinkle, crumble

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Structures	<ul style="list-style-type: none"> I know about different techniques for joining materials, such as how to use adhesive tape and different sorts of glue I know how to represent and construct my own ideas, thoughts and feelings through design I know how to use basic tools e.g. scissors or hole punches with construction materials. 	<ul style="list-style-type: none"> Know how to make freestanding structures stronger, stiffer and more stable. Know and use technical vocabulary relevant to the project. 	<ul style="list-style-type: none"> Know how to make freestanding structures stronger, stiffer and more stable. Know and use technical vocabulary relevant to the project. 	<ul style="list-style-type: none"> Develop and use knowledge of how to construct strong, stiff shell structures. Develop and use knowledge of nets of cubes and cuboids and, where appropriate, more complex 3D shapes. Know and use technical vocabulary relevant to the project. 	<ul style="list-style-type: none"> Develop and use knowledge of how to construct strong, stiff shell structures. Develop and use knowledge of nets of cubes and cuboids and, where appropriate, more complex 3D shapes. Know and use technical vocabulary relevant to the project. 	<ul style="list-style-type: none"> Understand how to strengthen, stiffen and reinforce 3-D frameworks. Know and use technical vocabulary relevant to the project. 	<ul style="list-style-type: none"> Understand how to strengthen, stiffen and reinforce 3-D frameworks. Know and use technical vocabulary relevant to the project.
Vocabulary		cut, fold, join, fix structure, wall, tower, framework, weak, strong, base, top, underneath, side, edge, surface, thinner, thicker, corner, point, straight, curved, metal, wood, plastic circle, triangle, square, rectangle, cuboid, cube, cylinder	cut, fold, join, fix structure, wall, tower, framework, weak, strong, base, top, underneath, side, edge, surface, thinner, thicker, corner, point, straight, curved, metal, wood, plastic circle, triangle, square, rectangle, cuboid, cube, cylinder	shell structure, three dimensional (3-D) shape, net, cube, cuboid, prism, vertex, edge, face, length, width, breadth, capacity, marking out, scoring, shaping, tabs, adhesives, joining, assemble, accuracy, material, stiff, strong, reduce, reuse, recycle, corrugating, ribbing, laminating, font, lettering, text, graphics, decision,	shell structure, three dimensional (3-D) shape, net, cube, cuboid, prism, vertex, edge, face, length, width, breadth, capacity, marking out, scoring, shaping, tabs, adhesives, joining, assemble, accuracy, material, stiff, strong, reduce, reuse, recycle, corrugating, ribbing, laminating, font, lettering, text, graphics, decision,	frame structure, stiffen, strengthen, reinforce, triangulation, stability, shape, join, temporary, permanent	frame structure, stiffen, strengthen, reinforce, triangulation, stability, shape, join, temporary, permanent

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				lettering, text, graphics, decision,			
TEXTILES	I know the names of tools needed to work the materials e.g. needle	techniques e.g. running stitch, glue, over stitch, stapling. • Explore different finishing techniques • Know and use technical vocabulary relevant to the project. joining and finishing techniques, tools, fabrics and components, template, pattern pieces, mark out, join, decorate, finish	techniques e.g. running stitch, glue, over stitch, stapling. • Explore different finishing techniques • Know and use technical vocabulary relevant to the project. joining and finishing techniques, tools, fabrics and components, template, pattern pieces, mark out, join, decorate, finish	Know how to strengthen, stiffen and reinforce existing fabrics. • Understand how to securely join two pieces of fabric together. • Understand the need for patterns and seam allowances. • Know and use technical vocabulary relevant to the project.	Know how to strengthen, stiffen and reinforce existing fabrics. • Understand how to securely join two pieces of fabric together. • Understand the need for patterns and seam allowances. • Know and use technical vocabulary relevant to the project.	• Produce a 3-D textile product from a combination of accurately made pattern pieces, fabric shapes and different fabrics. • Understand how fabrics can be strengthened, stiffened and reinforced where appropriate. • Know and use technical vocabulary relevant to the project.	• Produce a 3-D textile product from a combination of accurately made pattern pieces, fabric shapes and different fabrics. • Understand how fabrics can be strengthened, stiffened and reinforced where appropriate. • Know and use technical vocabulary relevant to the project.
VOCABULARY		joining and finishing techniques, tools, fabrics and components, template,	joining and finishing techniques, tools, fabrics and components, template, pattern	fabric, names of fabrics, fastening, compartment, zip, button, structure,	fabric, names of fabrics, fastening, compartment, zip, button, structure, finishing technique,	seam, seam allowance, wadding, reinforce, right side, wrong side, hem, template,	seam, seam allowance, wadding, reinforce, right side, wrong side, hem, template, pattern pieces, name of

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		pattern pieces, mark out, join, decorate, finish	pieces, mark out, join, decorate, finish	finishing technique, strength, weakness, stiffening, templates, stitch, seam, seam allowance	strength, weakness, stiffening, templates, stitch, seam, seam allowance	pattern pieces, name of textiles and fastenings used, pins, needles, thread, pinking shears, fastenings,	textiles and fastenings used, pins, needles, thread, pinking shears, fastenings,
Mechanisms/mechanical systems	<ul style="list-style-type: none"> I know how to use a variety of materials, tools and techniques, experimenting with form and function I know about different techniques for joining materials, such as split pins Experiment with paper and card to make simple flaps and hinges. 	<ul style="list-style-type: none"> Explore and use sliders and levers. Understand that different mechanisms produce different types of movement. Know and use technical vocabulary relevant to the project. 	<ul style="list-style-type: none"> Explore and use wheels, axles and axle holders. Distinguish between fixed and freely moving axles. Know and use technical vocabulary relevant to the project. 	<ul style="list-style-type: none"> Understand and use lever and linkage mechanisms. Distinguish between fixed and loose pivots. Know and use technical vocabulary relevant to the project. 		<ul style="list-style-type: none"> Understand that mechanical and electrical systems have an input, process and an output. Understand how gears and pulleys can be used to speed up, slow down or change the direction of movement. Know and use technical vocabulary relevant to the project. 	<ul style="list-style-type: none"> Understand that mechanical and electrical systems have an input, process and an output. Understand how gears and pulleys can be used to speed up, slow down or change the direction of movement. Know and use technical vocabulary relevant to the project.

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Vocabulary		<p>slider, lever, pivot, slot, bridge/guide, card, masking tape, paper fastener, join, pull, push, up, down, straight, curve,</p> <p>forwards, backwards</p>	<p>vehicle, wheel, axle, axle holder, chassis, body, cab assembling, cutting, joining, shaping, finishing, fixed, free, moving, mechanism names of tools, equipment and materials used</p>	<p>mechanism, lever, linkage, pivot, slot, bridge, guide system, input, process, output linear, rotary, oscillating, reciprocating</p>		<p>pulley, drive belt, gear, rotation, spindle, driver, follower, ratio, transmit, axle, motor, circuit, switch, circuit diagram, annotated drawings, exploded diagrams, annotated drawings, exploded diagrams, mechanical system, electrical system, input, process, output</p>	<p>pulley, drive belt, gear, rotation, spindle, driver, follower, ratio, transmit, axle, motor, circuit, switch, circuit diagram, annotated drawings, exploded diagrams, mechanical system, electrical system, input, process, output</p>
Electrical system					<ul style="list-style-type: none"> • Understand and use electrical systems in their products linked to science coverage. • Apply their understanding of computing to program and control their products. • Know and use 	<p>Understand and use electrical systems in their products linked to science coverage.</p> <ul style="list-style-type: none"> • Apply their understanding of computing to program, monitor and control their products. 	<p>Understand and use electrical systems in their products linked to science coverage.</p> <ul style="list-style-type: none"> • Apply their understanding of computing to program, monitor and control their products. • Know and use technical vocabulary relevant to the project.

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					technical vocabulary relevant to the project.	products. • Know and use technical vocabulary relevant to the project.	
Vocabulary					series circuit, fault, connection, toggle switch, push-to-make switch, push-to-break switch, battery, battery holder, bulb, bulb holder, wire, insulator, conductor, crocodile clip, control, program, system, input device, output device	reed switch, toggle switch, push- to-make switch, push-to-break switch, light dependent resistor (LDR), tilt resistor (LDR), tilt switch, light emitting diode (LED), bulb, bulb holder, battery, battery holder, USB cable, wire, insulator, conductor, crocodile clip control, program, system, input device, output device, series circuit, parallel circuit	reed switch, toggle switch, push- to-make switch, push-to-break switch, light dependent resistor (LDR), tilt switch, light emitting diode (LED), bulb, bulb holder, battery, battery holder, USB cable, wire, insulator, conductor, crocodile clip control, program, system, input device, output device, series circuit, parallel circuit

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SKILLS	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Generating ideas Designing	<p>Use what I have learnt about materials, thinking about uses and purposes</p> <p>Think about and discuss what I want to make</p> <p>Discuss my work as it progresses</p>	<ul style="list-style-type: none"> Design appealing products for a particular user based on simple design criteria. Generate initial ideas and design criteria through own experiences. Develop and communicate these ideas 	<ul style="list-style-type: none"> Generate ideas based on simple design criteria and their own experiences, explaining what they could make. Develop, model and communicate their ideas through talking, mock-ups and drawings. 	<ul style="list-style-type: none"> Generate realistic ideas through discussion and design criteria for an appealing, functional product fit for purpose and specific user/s. Use annotated sketches, prototypes, final product sketches and pattern pieces; communication technology, such 	<ul style="list-style-type: none"> Generate and clarify ideas through discussion with peers to develop design criteria to inform the design of products that are fit for purpose, aimed at particular individuals or groups. Use annotated sketches and appropriate information and communication 	<ul style="list-style-type: none"> Generate innovative ideas through research including surveys, interviews and questionnaires .and discussion with peers to develop a design brief and criteria for a design specification. • Design purposeful, functional, appealing 	<ul style="list-style-type: none"> Use research using surveys, interviews, questionnaires and web-based resources. to develop a design specification for a range of functional products. Develop a simple design specification to guide the development of their ideas and products, taking account of constraints including

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		through talk and drawings and mock ups where relevant.		as		products for the intended user that are fit for purpose	
				web-based recipes, to develop and communicate ideas.	technology, such as web-based recipes, to develop and communicate ideas. • Generate, develop, model and communicate realistic ideas through discussion and, as appropriate, annotated sketches, cross-sectional and exploded diagrams.	based on a simple design specification . • Develop and communicate ideas through discussion, annotated drawings, exploded drawings and drawings	time, resources and cost. • Generate and develop innovative ideas and share and clarify these through discussion. • Communicate ideas through annotated sketches, pictorial representations of

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						from different views. and, where appropriate, computer-aided design	electrical circuits or circuit diagrams.
Making	<ul style="list-style-type: none"> Explore a variety of materials, tools and techniques. Experimenting with design, form and function. Represent and construct my own ideas, thoughts and 	<ul style="list-style-type: none"> Select and use simple utensils, tools and equipment to perform a job e.g. peel, cut, slice, 	<ul style="list-style-type: none"> Plan by suggesting what to do next. Select and use tools, equipment, skills and techniques to perform 	<ul style="list-style-type: none"> Plan the main stages of making. Select from and use a range of appropriate utensils, tools and equipment with some accuracy related 	<ul style="list-style-type: none"> Order the main stages of making. Select and use appropriate tools to measure, mark out, cut, score, shape and combine with some accuracy related to their products. 	<ul style="list-style-type: none"> Produce detailed lists of equipment and fabrics relevant to their tasks Write a step-by step plan, including a 	<ul style="list-style-type: none"> Formulate a step by-step plan to guide making, listing tools, equipment, materials and components.

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	<p>feelings through a design.</p> <ul style="list-style-type: none"> • Explore different techniques for joining materials, such as how to use adhesive tape and different sorts of glue. • Use a range of materials and tools with care and precision. 	<p>squeeze, grate and chop safely; marking out, cutting, joining and finishing; cut, shape and join paper and card.</p> <ul style="list-style-type: none"> • Select from a range of ingredients and materials according to their characteristics to create a chosen 	<p>practical tasks, explaining their choices.</p> <ul style="list-style-type: none"> • Select new and materials, components, reclaimed materials and construction kits to build and create their products. • Use simple finishing techniques suitable for the products they are creating. 	<p>to their product.</p> <ul style="list-style-type: none"> • Select from and use finishing techniques suitable for the product they are creating. 	<ul style="list-style-type: none"> • Explain their choice of materials according to functional properties and aesthetic qualities. • Select from and use materials and components, including ingredients, construction and electrical components 	<p>list of resources required.</p> <ul style="list-style-type: none"> • Select from and use, a range of appropriate utensils, tools and equipment accurately to measure and combine appropriate ingredients, materials and resources. 	<ul style="list-style-type: none"> • Competently select from and use appropriate tools to accurately measure, mark, cut and assemble materials, and securely connect electrical components to produce reliable, functional products. • Use finishing and decorative techniques suitable for the product they
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		product.					
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					according to their function and properties.		are designing and making.
Evaluating	Describe what I like and dislike about my creation Adapt work where necessary	<ul style="list-style-type: none"> • Taste, explore and evaluate a range of products to determine the intended user's preference 	<ul style="list-style-type: none"> • Explore a range of existing products related to their design criteria. • Evaluate their product by discussing how 	<ul style="list-style-type: none"> • Investigate a range of 3-D textile products, ingredients and lever and linkage products relevant to their project. • Test their product against 	<ul style="list-style-type: none"> • Investigate and evaluate a range of products including the ingredients, materials, components and techniques that are used. 	<ul style="list-style-type: none"> • Investigate and analyse products linked to their final product. • Compare the final 	<ul style="list-style-type: none"> • Continually evaluate and modify the working features of the product to match the initial design

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		<p>s for the product</p> <ul style="list-style-type: none"> • Evaluate their ideas throughout and finished products against design criteria, including intended user and purpose. 	<p>well it works in relation to the purpose, the user and whether it meets the original design criteria.</p>	<p>the original design criteria and with the intended user.</p> <ul style="list-style-type: none"> • Evaluate the ongoing work and the final product with reference to the design criteria and the views of others. 	<ul style="list-style-type: none"> • Test and evaluate their own products against design criteria and the intended user and purpose. • Evaluate their ideas and products against their own design criteria and identify the strengths and areas for improvement in their work. 	<p>product to the original design specification and record the evaluations.</p> <ul style="list-style-type: none"> • Test products with intended user and critically evaluate the quality of the design, manufacture, functionality and fitness for purpose. • Consider the views of 	<p>specification.</p> <ul style="list-style-type: none"> • Critically evaluate their products against their design specification, intended user and purpose, identifying strengths and areas for development, and carrying out appropriate tests. • Test the system to demonstrate its effectiveness for the intended user and
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						others to improve their work	purpose.
Vocabulary		planning, investigating design, evaluate, make, user, purpose, ideas, product,	investigating, planning, design, make, evaluate, user, purpose, ideas, design criteria, product, function	user, purpose, design, model, evaluate, prototype, annotated sketch, functional, innovative, investigate, label, drawing, function,	evaluating, design brief design criteria, innovative, prototype, user, purpose, function, prototype, design criteria, innovative, appealing, design	design decisions, functionality, authentic, user, purpose, design specification, design brief, innovative, research, evaluate,	function, innovative, design specification, design brief, user, purpose design brief, design specification, prototype, annotated sketch, purpose,
				planning, design	brief, planning,	design criteria,	user, innovation,

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				criteria, annotated sketch, appealing	annotated sketch, sensory evaluations	annotate, evaluate, mock-up, prototype	research, functional, mock- up, prototype
	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Our Teaching Sequence and Rationale	<p><u>Unit 1:</u> <u>We teach this:</u></p> <p><u>We teach this now</u> <u>because:</u></p>	<p><u>Unit 1:</u> <u>We teach</u> <u>this:</u> Mechanisms</p> <p><u>We teach this</u> <u>now</u> <u>because:</u> Explore and use sliders and levers. Build on early experience of making hinges and flaps.</p>	<p><u>Unit 1:</u> <u>We teach this:</u> Mechanisms</p> <p><u>We teach this now because:</u> Explore and use wheels, axles and axle holders. Build on exploring moving vehicles through play and developed some cutting joining and finishing skills with card.</p>	<p><u>Unit 1:</u> <u>We teach this:</u> Shell structures</p> <p><u>We teach this now because:</u> Develop and use knowledge of nets, cubes and cuboids and where appropriate ,more complex 3D shapes. Build on knowledge of a basic understanding of 2D and 3 D shapes.</p>	<p><u>Unit 1:</u> <u>We teach this:</u> Healthy and varied Diet</p> <p><u>We teach this now because:</u> Know how to use equipment and utensils and know about a range of fresh and processed ingredients. Build on experience of some ways to prepare ingredients safely. How to use equipment and utensils combined with ingredients to make a product.</p>	<p><u>Unit 1:</u> <u>We teach this:</u> Frame Structures</p> <p><u>We teach this now because:</u> Understand how to strengthen, stiffen and reinforce- 3D frameworks. Builds on experience measuring ,marking out, cutting ,joining and shaping techniques with construction materials</p>	<p><u>Unit 1:</u> <u>We teach this:</u> CAMS</p> <p><u>We teach this now because:</u> Understand how cams can be used to produce different types of movement and change the direction. Builds on experience of axles and wheels.</p>

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	<p><u>Unit 2:</u> <u>We teach this:</u></p> <p><u>We teach this now</u> <u>because:</u></p>	<p><u>Unit 2:</u> <u>We teach</u> <u>this:</u> Structures <u>We teach this</u> <u>now</u> <u>because:</u> To know how to make free standing</p>	<p><u>Unit 2:</u> <u>We teach</u> <u>this:</u> Food <u>We teach this</u> <u>now because:</u> Food</p>	<p><u>Unit 2:</u> <u>We teach</u> <u>this:</u> Healthy and varied Diet <u>We teach this</u> <u>now because:</u></p>	<p><u>Unit 2:</u> <u>We teach this:</u> Electrical systems <u>We teach this now</u> <u>because:</u></p>	<p><u>Unit 2:</u> <u>We teach this:</u> Pulleys and Gears <u>We teach this</u> <u>now because:</u></p>	<p><u>Unit 2:</u> <u>We teach this:</u> Celebrating culture and seasonality</p>

Our school provides a foundation for **all to flourish** rooted in the person and work of Jesus;



built upon Christian values encouraging aspirational achievement.

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		structures stronger, stiffer and more stable. Build on experience of different methods of joining card and paper.	Preparing food and vegetables We teach this now because: Understand where produce comes from and how to use basic principles of a healthy and varied diet.	Know how to use equipment and utensils and know about a range of fresh and processed ingredients. Build on experience of some ways to prepare ingredients safely. How to use equipment and utensils combined with ingredients to make a product.	Understand and use electrical systems- such as circuits, switches, bulbs and buzzes. Build on constructing simple electrical circuits	Understand how gears and pulleys can be used to speed up, slow down or change direction. Understand that mechanical and electrical systems have an input process and an output. Builds on experience, axle holders and wheels. Understanding of electrical circuits.	<u>We teach this now because:</u> Understand about seasonality in relation to food products and the source of different food products. Builds on food hygiene, nutrition and a varied diet.
	<u>Unit 3:</u> <u>We teach this:</u>	<u>Unit 3:</u> <u>We teach this:</u> Food Preparing food and vegetables	<u>Unit 3:</u> <u>We teach this:</u> Textiles	<u>Unit 3:</u> <u>We teach this:</u> Textiles	<u>Unit 3:</u> <u>We teach this:</u> Mechanical Systems Pneumatic systems <u>We teach this now because:</u>	<u>Unit 3:</u> <u>We teach this:</u> Celebrating culture and seasonality	<u>Unit 3:</u> <u>We teach this:</u> Textiles Combining different fabric shapes

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	<u>We teach this now because:</u>	<u>We teach this now because:</u> Understand where produce comes from and how to use basic principles of a healthy and varied diet.	<u>We teach this now because:</u> Understand how to join fabrics using different techniques. Build on experience Cutting and joining fabrics with simple techniques.	<u>We teach this now because:</u> Know how to securely join two pieces of fabrics together. Understand how to securely join two pieces of fabric together. Understand the need for patterns. Builds on joining fabrics by gluing and stitching and using simple patterns and templates for marking out.	Understand and use pneumatic systems. Build on simple mechanisms ,such as sliders and levers. How materials can be joined.	<u>We teach this now because:</u> Understand about seasonality in relation to food products and the source of different food products. Builds on food hygiene, nutrition and a varied diet.	<u>We teach this now because:</u> A 3 D textile product- can be made from a combination of pattern pieces, fabric shapes and different fabrics. Experience of stitching, joining textiles.
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