

St John's Catholic Primary Progression Map - Design and Technology

Early years Progression maps		
30-50 months:		
Physical Development	Moving and handling	<ul style="list-style-type: none"> To use one-handed tools and equipment.
	Health and self-care	<ul style="list-style-type: none"> To understand that equipment and tools have to be used safely.
Understanding of the World	Technology	<ul style="list-style-type: none"> To show an interest in technological toys with knobs or pulleys, or real objects. To show skill in making toys work by pressing parts or lifting flaps to achieve effects, such as sound, movements or new images.
Expressive Arts and Designs	Exploring and using media and materials	<ul style="list-style-type: none"> To enjoy joining in with dancing and ring games. To begin to move rhythmically. To imitate movement in response to music. To tap out simple repeated rhythms.
	Being imaginative	<ul style="list-style-type: none"> To develop preferences for forms of expression. To use movements to express feelings. To create movement in response to music.

		<ul style="list-style-type: none"> To capture experiences and responses with a range of media, such as music, dance and paint and other materials or words.
40-60 months		
Physical Development	Moving and handling	<ul style="list-style-type: none"> To use simple tools to effect changes to materials. To handle tools, objects, construction and malleable materials safely and with increasing control.
	Health and self-care	<ul style="list-style-type: none"> To show understanding of the need for safety when tackling new challenges and consider and manage some risks. To show understanding of how to transport and store equipment safely. To practise some appropriate safety measures without direct supervision.
Expressive Arts and Designs	Exploring and using media and materials	<ul style="list-style-type: none"> To explore what happens when they mix colours. To experiment to create different textures. To understand that different media can be combined to create new effects. To manipulate materials to achieve a planned effect. To construct with a purpose in mind, using a variety of resources. To use simple tools and techniques competently and appropriately.

		<ul style="list-style-type: none"> • To select appropriate resources and adapt work where necessary. • To select tools and techniques needed to shape, assemble join materials they are using.
	Being imaginative	<ul style="list-style-type: none"> • To create simple representations of events, people and objects. • To choose particular colours to use for a purpose.
ELG		
Physical Development	Moving and handling	<ul style="list-style-type: none"> • To handle equipment and tools effectively, including pencils for writing.
Expressive Arts and Design	Exploring and using media and materials	<ul style="list-style-type: none"> • To safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.
	Being imaginative	<ul style="list-style-type: none"> • To use what they have learnt about media and material in original ways, thinking about media and materials in original ways, thinking about uses and purposes. They represent their own ideas, thoughts and feelings through design and technology, art, music, dance, role play and stories.

KS1 and KS2 Progression Map

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Design	<p>Follow verbal instructions.</p> <ul style="list-style-type: none"> -Explain what they are making and select the materials they are using. -Develop their design ideas by drawing on their own experiences. -Discuss their work as it progresses. 	<p>As in year one plus:</p> <ul style="list-style-type: none"> - Select and name tools needed for the materials. -Select appropriate techniques explaining: first, next and last. -Identify a purpose for what they intend to design and make. -Use drawings and labels to record ideas 	<p>As in year two plus:</p> <ul style="list-style-type: none"> -Investigate similar products to the one being made, to give a starting point to the design. -Generate ideas for an item, considering its purpose and the user. -Draw, sketch and label products to analyse how they are made. -Plan the order of their work 	<p>As in year three plus:</p> <ul style="list-style-type: none"> -Make labelled drawings from different views showing specific features. -Develop more than one design or adaptation of the initial 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 attempt fails. 	<p>As in year four plus:</p> <ul style="list-style-type: none"> -Generate ideas through brainstorming and identifying a purpose for their product. -Draw up a specification for their design. -Sketch and model alternative ideas. -Record ideas using annotated diagrams -Make prototypes. 	<p>As in year five plus:</p> <ul style="list-style-type: none"> -Combine modelling and drawing to refine ideas. -Plan a sequence of work using a storyboard. -Use a computer to model ideas. -Draw a plan which can be read/followed by someone else. -Give a report using correct

		as they are developed.	before starting and select appropriate materials and tools needed.	-Evaluate products and identify criteria that can be used for their own designs.	-Use results of investigation and information sources when developing design ideas.	technical vocabulary.
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Make	-Make their design using appropriate techniques. -Use appropriate tools safely such as scissors	As in year one plus: -Select tools and materials; use vocab to name and describe them.	As in year two plus: - Measure, mark out, cut and assemble components with more accuracy.	As in year three plus: - Measure, mark out, cut and shape a range of materials using appropriate tools, equipment and techniques.	As in year four plus: -Weigh and measure accurately (time, dry ingredients, liquids) -Apply the rules of	As in year five plus: -Assemble components to make working models. -construct products using

	<p>and a hole punch.</p> <p>-Assemble, join and combine materials together such as glue, masking tape etc.</p> <p>-Select and use appropriate fruit and vegetables and tools.</p> <p>-Use basic food hygiene practices and personal hygiene.</p>	<p>-Measure and cut with accuracy.</p> <p>-Assemble, join and combine materials together using basic sewing techniques.</p>	<p>- Measure, tape or pin, cut and join fabric with some accuracy.</p> <p>- Demonstrate hygienic food preparation and storage.</p> <p>- Use simple finishing techniques to improve the appearance of their product using a range of equipment including ICT.</p>	<p>-Join and combine components accurately in temporary and permanent ways.</p> <p>-Use simple graphical communication techniques.</p>	<p>safety practices e.g relating to the use of ovens.</p> <p>- Cut and join with accuracy to ensure a good quality finish to the product.</p>	<p>permanent joining techniques</p> <p>-Make modifications as they go along.</p> <p>-Pin, sew and stitch, weave or knit together to create a product.</p>
--	--	---	--	--	---	---

	<p>-Use simple finishing techniques to improve the appearance of their product.</p>					
--	---	--	--	--	--	--

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	<p>-Evaluate their product by discussing how well it works in relation to the purpose.</p> <p>-Evaluate their products as they are developed, identifying strengths and possible changes.</p>	<p>As in year one plus: -Evaluate against their design criteria.</p> <p>-Talk about their ideas, saying what they like and dislike about them.</p>	<p>As in year two plus: - Evaluate against the original design criteria and how it meets its intended purpose and user.</p> <p>- Disassemble and evaluate familiar products.</p>	<p>As in year three plus: -Evaluate their work both during and at the end of their design.</p> <p>-Evaluate their products carrying out appropriate tests.</p>	<p>As in year four plus: -Evaluate the product personally and seek evaluation from others.</p>	<p>As in year five plus: -Evaluate their products using strengths and areas of development and carrying out appropriate tests.</p> <p>-Evaluate against the original criteria and suggest ways their product could be improved.</p>

	<p>-Ask questions about what they have made and how they have gone about it.</p>					
--	--	--	--	--	--	--

Vocabulary	Years 1/2	Years 3/4	Years 5/6
	Textiles/ Structures- Names of existing products, joining and finishing techniques, tools, fabrics and components.	Textiles/ Structures Names of existing products using joining and finishing techniques.	Textiles/ Structures- Frame structure, stiffen, strengthen, reinforce,
	Template, pattern pieces, mark out, join, decorate, finish.	Stitch, sow, join, mark out, cut, fabric, textiles, pattern piece, product, decorate, finish.	triangulation, stability, shape, join, temporary, permanent.
	Features, suitable, quality, design criteria, make, evaluate, user, purpose, function.	Features, suitable, quality, design criteria, make, evaluate, user, purpose, function.	Design brief, design specification, prototype, annotated sketch, purpose, user, innovation, research, functional.
Food- Fruit and vegetable names, names of equipment and utensils.	Food- Name of products, names of equipment, utensils, techniques and ingredients.	Template, pattern pieces, mark out, join, decorate, finish.	
Sensory vocabulary e.g soft, juicy, crunchy, sweet, sticky, smooth, sharp, crisp, sour and hard.	Texture, taste, sweet, sour, hot, spicy, appearance, smell, preference, greasy, moist, cook, fresh, savoury.	Food- Ingredients, yeast, dough, bran, flour, wholemeal,	
Flesh, skin, seed, pip, core, slicing, peel, cutting, squeezing, healthy diet, choosing ingredients, planning investigating, tasting, arranging, popular, design, evaluate , criteria.	Hygienic, edible, grown, reared, caught, frozen, tinned,		

	<p>Mechanisms- Vehicle, wheel, axle, axle holder, chassis, body, cab.</p> <p>Assembling, cutting, joining, shaping, finishing, fixed, free, moving, mechanism.</p> <p>Names of tools, equipment and materials used.</p> <p>Design, make, evaluate, purpose, user, criteria and functional.</p>	<p>processed, seasonal, harvested, healthy/varied diet.</p> <p>Planning, design criteria. Purpose, user, annotated sketch, sensory evaluations.</p> <p>Mechanisms- Mechanism, lever, linkage, pivot, slot, bridge, guide.</p> <p>System, input, process, output.</p> <p>Linear, rotary, oscillating, reciprocating. User, purpose, function.</p> <p>Prototype, design criteria, innovative, appealing and design brief.</p> <p>Electrical systems- Series circuit, fault, connection, toggle switch, push-to-make switch, push to break switch, battery, battery holder, bulb, bulb holder, wire,</p>	<p>unleavened, baking soda, spice, herbs</p> <p>Fat, sugar, carbohydrate, protein, vitamins, nutrients, nutrition, healthy, varied, gluten, dairy, allergy, intolerance, savoury, source, seasonality.</p> <p>Utensils, combine, fold, knead, stir, pour, mix, rubbing in, whisk, beat, roll out, shape, sprinkle, crumble.</p> <p>Design specification, innovate, research, evaluate, design brief.</p> <p>Electrical systems- Series circuit, parallel circuit,</p>
--	---	---	--

		<p>insulator, conductor, crocodile clip.</p> <p>Control, programme, system, input device, output device.</p> <p>User, purpose, function prototype, design criteria, innovative, appealing, design brief.</p>	<p>names of switches, and components, input device, output device, system, monitor, control, program, flow chart.</p> <p>Function, innovate, design specification, design brief, user, purpose.</p> <p>Mechanisms- Mechanism, lever, linkage, pivot, slot, bridge, guide.</p> <p>System, input, process, output. Linear, rotary, oscillating, reciprocating. User, purpose, function.</p> <p>Prototype, design criteria, innovative, appealing and design brief</p>
--	--	--	--

