



Design & Technology Progression Map 2024-25

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Design	Physical Development/Fine Motor Skills Hold a pencil effectively for fluent writing – using a tripod grip in almost all cases Begin to show accuracy and care when drawing.	Create simple designs for a product. Use pictures and words to describe what he/she wants to do.	Design purposeful, functional, appealing products for himself/herself and other users based on design criteria. Generate, develop, model and communicate his/her ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology.	Use knowledge of existing products to design his/her own functional product. Create designs using annotated sketches.	Use knowledge of existing products to design a functional and appealing product for a particular purpose and audience. Create designs using cross-sectional diagrams and pattern pieces.	Use research he/she has done into famous designers and inventors to inform the design of his/her own innovative products. Create designs using exploded diagrams. Use prototypes to show his/her ideas.	Use his/her research into existing products and his/her market research to inform the design of his/her own innovative product. Generate, develop, model and communicate his/her ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.
Make	Physical Development/Fine Motor Skills Use a range of small tools, including scissors, paintbrushes and cutlery. Expressive Arts and Design Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.	Use a range of simple tools to cut, join and combine materials and components safely.	Safely measure, mark out, cut and shape materials and components using a range of tools. Choose appropriate tools, equipment, techniques and materials from a wide range.	Safely measure, mark out, cut, assemble and join with some accuracy.	Use techniques which require more accuracy to cut, shape, join and finish his/her work. Use his/her knowledge of cutting and preparing seasonal food.	Make careful and precise measurements so that joins, holes and openings are in exactly the right place. Use his/her knowledge of techniques and the functional and aesthetic qualities of a wide range of materials to plan how to use them.	Apply his/her knowledge of materials and techniques to refine and rework his/her product to improve its functional properties and aesthetic qualities.
Evaluate	Expressive Arts and Design Share their creations, explaining the process they have used.	Ask simple questions about existing products and those that he/she has made.	Evaluate and assess existing products and those that he/she has made using design criteria.	Investigate and analyse existing products and those he/she has made, considering a wide range of factors.	Consider how existing products and his/her own finished products might be improved and how well they meet the needs of the intended user.	Make detailed evaluations about existing products and his/her own considering the views of others to improve his/her work.	Use his/her knowledge of famous designs to further explain the effectiveness of existing products and products he/she have made.
Technical Knowledge		Explore and use mechanisms (wheels and axles) in his/her products.	Investigate different techniques for stiffening a variety of materials and explore different methods of enabling structures to remain stable. Explore and use mechanisms (levers and sliders) in his/her products.	Strengthen frames using diagonal struts. Understand how mechanical systems such as levers and linkages or pneumatic systems create movement.	Understand and use electrical systems in products.	Build more complex 3D structures and apply his/her knowledge of strengthening techniques to make them stronger or more stable Understand how to use more complex mechanical systems, e.g. lever and linkages.	Apply his/her understanding of mechanisms; exploring exploded diagrams and exploring cam shapes. Build more complex 3D structures and apply his/her knowledge of strengthening techniques to make them stronger or more stable

A Saint Michael's learner: Can design, make and evaluate a useful product; loves creating nutritious meals; knows how good design can improve the world.





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Cooking & Nutrition	Say where some food comes from and give examples of food that is grown. Talk about what he/she eats at home and begin to discuss what healthy foods are. Use simple tools with help to prepare food safely.	Understand the need for a variety of food in a diet. Understand that all food has to be farmed, grown or caught. Use a wider range of cookery techniques to prepare food safely.		Understand what makes a healthy and balanced diet, and that different foods and drinks provide different substances the body needs to be healthy and active. Understand seasonality and the advantages of eating seasonal and locally produced food. Use a wider variety of ingredients and techniques to prepare and combine ingredients safely.	Understand how a variety of ingredients are grown, reared, caught and processed to make them safe and palatable / tasty to eat. Understand the main food groups and the different nutrients that are important for health. Research, plan and prepare and cook a savoury dish, applying his/her knowledge of ingredients and his/her technical skills.	
Vocabulary	Design, tools, materials, mechanisms –wheels and axles, cut, join, healthy foods, prepare.	Develop, model, measure, mark out, shape, components, evaluate, assess, stiffer, stable, mechanisms – levers and sliders, diet, farmed, grown, caught,	Annotated sketches, functional, assemble, accuracy, investigate, analyse, strengthen, diagonal struts, mechanical systems – pneumatic systems.	Cross-sectional diagrams, pattern pieces, functional and appealing, purpose, audience, electrical systems, healthy balanced diet, substances, seasonality, locally produced food, ingredients, prepare and combine.	Market research, innovative, exploded diagrams, prototypes, precise measurements, 3D structures, complex mechanical systems – levers and linkages, reared, processed, safe and palatable, food groups, nutrients, savoury dish.	Refine, improve, functional properties, effectiveness, inventors, computer-aided design, monitor and control.
Cultural Capital			Design: The Tower of London and Windsor Castle were both built by William the Conqueror.	Cooking and Nutrition: Identify the different climates fruits and vegetables grow in. Technical Knowledge - electrical systems: English inventor David Misell, who invented the first torch in 1899.	Design: English civil engineer- Isambard Kingdom Brunel who constructed a network of tunnels, bridges and viaducts for the Great Western Railway; Thomas Telford who designed The Menai Suspension Bridge in Wales.	

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