



## English Martyrs Catholic Voluntary Academy

We grow and learn, with the gifts we have been given, following in the footsteps of Jesus.

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Designing</b>							
<b>Understanding contexts, users and purposes</b>	Say whether their product is for them or other users.	Say whether their product is for them or other users.	Say whether their product is for them or other users.	Gather information about the needs and wants of particular individuals and groups	Gather information about the needs and wants of particular individuals and groups Develop their own design criteria and use these to inform their ideas	Carry out research, using surveys, interviews, questionnaires and web-based resources  Identify the needs, wants, preferences and values of particular individuals and groups	Carry out research, using surveys, interviews, questionnaires and web-based resources  Identify the needs, wants, preferences and values of particular individuals and groups
<b>Generating, developing, modelling and communicating ideas</b>	Share their creations, explaining the process they have used.	Use pictures and words to describe what he/she wants to do	Generate, develop, model and communicate his/her ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology	Create designs using annotated sketches, cross-sectional diagrams and simple computer programmes	Create designs using exploded diagrams  Use knowledge of existing products to design a functional and appealing product for a particular purpose and audience	Develop a simple design specification to guide their thinking  Use knowledge of existing products to design a functional and appealing product for a particular purpose and audience	Generate, develop, model and communicate his/her ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design



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<b>Making</b>							
<b>Planning</b>	Drawing what they have made, with some children drawing their ideas before they make	Create simple designs for a product	Design purposeful, functional, appealing products for himself/herself and other users based on design criteria	Design purposeful, functional, appealing products for himself/herself and other users	Use his/her knowledge of techniques and the functional and aesthetic qualities of a wide range of materials to plan how to use them	Produce step by step plans to guide his/her making, demonstrating that he/she can apply his/her knowledge of different materials, tools and techniques	Produce step by step plans to guide his/her making, demonstrating that he/she can apply his/her knowledge of different materials, tools and techniques
<b>Practical skills and techniques</b>	Use a range of small tools, including scissors, paintbrushes and cutlery  Developing practical skills and techniques using a range of materials including food, textiles and construction materials	Select from and use a range of tools and equipment to perform practical tasks e.g. cutting, shaping, joining and finishing  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  Make suitable choices from a wider range of tools and unfamiliar materials and plan out the main stages of using them	Use techniques which require more accuracy to cut, shape, join and finish his/her work e.g. Cutting internal shapes, slots in frameworks	Create prototypes to show his/her ideas  Make careful and precise measurements so that joins, holes and openings are in exactly the right place	Create prototypes to show his/her ideas  Make careful and precise measurements so that joins, holes and openings are in exactly the right place
	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Evaluating</b>							
<b>Own ideas and products</b>	Share their creations, explaining the	Ask simple questions about existing products	Evaluate and assess existing products and those that he/she	Investigate and analyse existing products and those he/she has	Consider how existing products and his/her own finished products	Make detailed evaluations about existing products and his/her own	Apply his/her knowledge of materials and techniques to refine



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	process they have used.	and those that he/she has made	has made using a design criteria	made, considering a wide range of factors	might be improved and how well they meet the needs of the intended user	considering the views of others to improve his/her work	and rework his/her product to improve its functional properties and aesthetic qualities
<b>Existing products</b>	Asking questions about a range of existing products  Exploring the designed and made world through the indoor and outdoor environment, and through roleplay	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 a 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 research he/she has done into famous designers and inventors to inform the design of his/her own innovative products  Use his/her knowledge of famous designs to further explain the effectiveness of existing products and products he/she have made
<b>Key events and individuals</b>							
	<b>EYFS</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Year 6</b>
<b>Technical Knowledge</b>							
<b>Making products work</b>	Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function	Build structures, exploring how they can be made stronger, stiffer and more stable  Use wheels and axles in a product	Investigate different techniques for stiffening a variety of materials and explore different methods of enabling	Strengthen frames using diagonal struts  Understand how mechanical systems such as levers and linkages or pneumatic systems create movement	Apply techniques he/she has learnt to strengthen structures and explore his/her own ideas  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	Use technical knowledge accurate skills to problem solve during the making process  Use a wide range of methods to strengthen, stiffen and reinforce complex structures and can use them



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	Developing their knowledge and understanding in relation to mechanisms, structures, food and textiles  Learning and using appropriate technical vocabulary		structures to remain stable  Explore and use mechanisms e.g. levers, sliders, wheels and axles, in his/her products			Understand how to use more complex mechanical and electrical systems	accurately and appropriately  Apply his/her understanding of computing to program, monitor and control his/her product
	<b>EYFS</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Year 6</b>
<b>Cooking and nutrition</b>							
<b>Where food comes from</b>		Talk about what he/she eats at home and begin to discuss what healthy foods are  Say where some food comes from and give examples of food that is grown	Understand the need for a variety of food in a diet Understand that all food has to be farmed, grown or caught	Talk about the different food groups and name food from each group  Understand that food has to be grown, farmed or caught in Europe and the wider world	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	Understand the main food groups and the different nutrients that are important for health Understand how a variety of ingredients are grown, reared, caught and processed to make them safe and palatable / tasty to eat	Confidently plan a series of healthy meals based on the principles of a healthy and varied diet  Use information on food labels to inform choices
<b>Food preparation, cooking and nutrition</b>	Learning procedures for safety and hygiene  Developing practical skills and techniques using a	Use simple tools with help to prepare food safely	Use a wider range of cookery techniques to prepare food safely	Use a wider variety of ingredients and techniques to prepare and combine ingredients safely	Read and follow recipes which involve several processes, skills and techniques	Select appropriate ingredients and use a wide range of techniques to combine them	Research, plan and prepare and cook a savory dish, applying his/her knowledge of ingredients and his/her technical skills



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	range of materials including food, textiles and construction materials						
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