



St Joseph's Catholic Primary School
Subject Yearly Overview - *Design and Technology*

Year Group	Autumn Term	Spring Term	Summer Term
Year 1	<p>Control Moving pictures Focus: Mechanisms (sliders and levers) Select from and use a wide range of NC Design purposeful, functional, appealing products for themselves and other users based on design criteria. Generate, develop, model and communicate ideas Select from and use a range of tools and equipment to perform practical tasks Explore and evaluate a range of existing products Evaluate their ideas Explore and use mechanisms. (sliders, levers)</p>	<p>Cooking and Nutrition Fruit and vegetables – Fruit Salad Focus: Food Preparing fruit and vegetables (including cooking and nutrition requirements for KS2) NC Design purposeful, functional, appealing products for themselves and other users based on design criteria. Select from and use a range of tools and equipment to perform practical tasks Select from and use a wide range of ingredients Explore and evaluate a range of existing products Evaluate their ideas</p>	<p>Structure Make a lighthouse Focus: Structures NC Design purposeful, functional, appealing products for themselves and other users based on design criteria. Generate, develop, model and communicate ideas Select from and use a range of tools and equipment to perform practical tasks Select from and use a wide range of materials and components. Explore and evaluate a range of existing products Evaluate their ideas Explore and use mechanisms. (levers, sliders)</p>
Year 2	<p>Textiles Puppets Focus: Textiles Templates and joining techniques NC Design purposeful, functional, appealing products for themselves and other users based on design criteria. Generate, develop, model and communicate ideas Select from and use a range of tools and equipment to perform practical tasks (cutting, shaping, joining and finishing) Select from and use a wide range of materials and textiles. Explore and evaluate a range of existing products Evaluate their ideas</p>	<p>Mechanisms Make a vehicle with wheels based on exploring. Focus: Mechanisms – wheels and axles NC Design purposeful, functional, appealing products for themselves and other users based on design criteria. Generate, develop, model and communicate ideas Select from and use a range of tools and equipment to perform practical tasks Explore and evaluate a range of existing products Evaluate their ideas Explore and use mechanisms. (wheels, axles)</p>	<p>Cooking and Nutrition Design and make a healthy pizza Focus: Food (including cooking and nutrition requirements for KS2) NC Design purposeful, functional, appealing products for themselves and other users based on design criteria. Select from and use a range of tools and equipment to perform practical tasks Select from and use a wide range of ingredients Explore and evaluate a range of existing products Evaluate their ideas</p>
Year 3	<p>Control Design and make a book with moving parts.</p>	<p>Structure Make a photo frame to display a map of the UK or city etc.</p>	<p>Textiles Design and make an Egyptian necklace</p>

	<p>Focus – Mechanisms. Moving parts, linkages and leavers</p> <p>NC Use research and develop design criteria to inform the design. Generate, develop, model and communicate ideas through discussion Select from and use a wide range of tools and equipment (cutting, joining, finishing) Select and use a wide range of materials.</p>	<p>Focus: Structures</p> <p>NC Use research and develop design criteria to inform the design. Generate, develop, model and communicate ideas through discussion Select from and use a wide range of tools and equipment Select from and use a wider range of materials including construction Investigate and analyse a range of existing products Evaluate their ideas and products against own design criteria Apply their knowledge of how to strengthen, reinforce</p>	<p>Focus: Textiles</p> <p>NC Use research and develop design criteria to inform the design. Generate, develop, model and communicate ideas through discussion Select from and use a wide range of tools and equipment Select from and use a wider range of materials and textiles Investigate and analyse a range of existing products Evaluate their ideas and products against own design criteria Apply their knowledge of how to strengthen, reinforce</p>
Year 4	<p><u>Mechanisms</u></p> <p>Make a moving character using pneumatics. Focus: Control – Mechanisms</p> <p>NC Use research and develop design criteria to inform the design. Generate, develop, model and communicate ideas through discussion Select from and use a wide range of tools and equipment Select from and use a wider range of materials and components Investigate and analyse a range of existing products Evaluate their ideas and products against own design criteria Apply their knowledge of how to strengthen, reinforce Understand and use mechanical systems and products</p>	<p><u>Electrical Systems</u></p> <p>Design and make a torch Focus: Control- electrical. Simple circuits including programming and control</p> <p>NC Use research and develop design criteria to inform the design. Generate, develop, model and communicate ideas through discussion Select from and use a wide range of tools and equipment Select from and use a wider range of materials and components Investigate and analyse a range of existing products Evaluate their ideas and products against own design criteria Understand how key events and individuals in design and technology have shaped the world. Apply their knowledge of how to strengthen, reinforce Understand and use electrical systems in their products (circuits, bulbs, switches)</p>	<p><u>Cooking and Nutrition</u></p> <p>Seasonal fruit and vegetables Focus: Cooking and Nutrition</p> <p>NC Use research and develop design criteria to inform the design. Generate, develop, model and communicate ideas through discussion Select from and use a wide range of tools and equipment Select from and use a wider range of ingredients Investigate and analyse a range of existing products Evaluate their ideas and products against own design criteria Understand how key events and individuals in design and technology have shaped the world. Apply their understanding of computing to program and monitor their products.</p>
Year 5	<p><u>Textiles</u></p> <p>Investigate and make a Christmas decoration Focus: Textiles</p> <p>NC Use research and develop design criteria to inform the design. Generate, develop, model and communicate ideas through discussion Select from and use a wide range of tools and equipment Select from and use a wider range of materials and textiles Investigate and analyse a range of existing products Evaluate their ideas and products against own design criteria Apply their knowledge of how to strengthen, reinforce</p>	<p><u>Mechanisms</u></p> <p>Design and Make an electrically controlled moon buggy Focus: – Mechanisms- Electrical control</p> <p>NC Use research and develop design criteria to inform the design. Generate, develop, model and communicate ideas through discussion Select from and use a wide range of tools and equipment Select from and use a wider range of materials and components Investigate and analyse a range of existing products Evaluate their ideas and products against own design criteria Apply their knowledge of how to strengthen, reinforce Understand and use mechanical systems and products Apply their understanding of computing to program, monitor and control their products</p>	<p><u>Structures</u></p> <p>Bridges - design and make a structure to support weight Focus – structures</p> <p>NC Use research and develop design criteria to inform the design. Generate, develop, model and communicate ideas through discussion Select from and use a wide range of tools and equipment Select from and use a wider range of materials including construction Investigate and analyse a range of existing products Evaluate their ideas and products against own design criteria Understand how key events and individuals in design and technology have shaped the world. Apply their knowledge of how to strengthen, reinforce Understand and use mechanical systems in their products linkages</p>

Year 6	<p>Structure Design and make a shelter to survive in the rainforest. Focus: Structures NC Use research and develop design criteria to inform the design. Generate, develop, model and communicate ideas through discussion Select from and use a wide range of tools and equipment Select from and use a wider range of materials including construction Investigate and analyse a range of existing products Evaluate their ideas and products against own design criteria Understand how key events and individuals in design and technology have shaped the world. Apply their knowledge of how to strengthen, reinforce</p>	<p>Cooking and Nutrition Bread – Design and make a variety of flavoured breads. Focus: – Food NC Use research and develop design criteria to inform the design. Generate, develop, model and communicate ideas through discussion Select from and use a wide range of tools and equipment Select from and use a wider range of ingredients Investigate and analyse a range of existing products Evaluate their ideas and products against own design criteria Understand how key events and individuals in design and technology have shaped the world. Apply their understanding of computing to program and monitor their products.</p>	<p>Mechanism Make a moving cam model to show a sporting hero Focus: Control NC Use research and develop design criteria to inform the design. Generate, develop, model and communicate ideas through discussion Select from and use a wide range of tools and equipment Select from and use a wider range of materials and components Investigate and analyse a range of existing products Evaluate their ideas and products against own design criteria Apply their knowledge of how to strengthen, reinforce Understand and use mechanical systems and products (cams)</p>