

Corpus Christi Catholic Primary

Year 1

Design and Technology Curriculum Overview



	Autumn Topic	Spring Topic	Summer Topic
<b>Topic</b>	<b>Mechanisms: Making a moving storybook</b>	<b>Mechanisms: Wheels and axes</b>	<b>Structures: Flying kites</b>
<b>Skills to develop:</b>	<ul style="list-style-type: none"> <li>• Explore and evaluate a range of existing products.</li> <li>• Design purposeful, functional, appealing products for themselves and other users based on design criteria.</li> <li>• Select from and use a range of tools and equipment to perform practical tasks.</li> <li>• Begin to select from and use a wide range of materials and components according to their characteristics.</li> <li>• Evaluate their ideas and products against design criteria.</li> </ul>	<ul style="list-style-type: none"> <li>• Explore and evaluate a range of existing products.</li> <li>• Design purposeful, functional, appealing products for themselves and other users based on design criteria.</li> <li>• Select from and use a range of tools and equipment to perform practical tasks accurately.</li> <li>• Generate, develop, model and communicate their ideas through talking, drawing, templates and mock-ups.</li> <li>• Evaluate their ideas and products against design criteria.</li> </ul>	<ul style="list-style-type: none"> <li>• Design purposeful, functional, appealing products for themselves and other users based on design criteria.</li> <li>• Generate, develop, model and communicate their ideas through talking, drawing, templates and mock-ups.</li> <li>• Explore and evaluate a range of existing products.</li> <li>• Evaluate their ideas and products against design criteria.</li> <li>• Select from and use a range of tools and equipment to perform practical tasks (e.g. cutting, shaping, joining &amp; finishing).</li> <li>• Select from and use a wide range of materials and components, including construction materials and textiles according to their characteristics.</li> <li>• Build structures, exploring how they can be made stronger, stiffer and more stable.</li> </ul>

<p><b>Key Learning/Sticky Knowledge</b></p>	<ul style="list-style-type: none"> <li>• To know that a mechanism is the parts of an object that move together.</li> <li>• To know that a slider mechanism moves an object from side to side.</li> <li>• To know that a slider mechanism has a slider, slots, guides and an object.</li> <li>• To know that bridges and guides are bits of card that purposefully restrict the movement of the slider.</li> </ul>	<ul style="list-style-type: none"> <li>• To know that wheels need to be round to rotate and move.</li> <li>• To understand that for a wheel to move it must be attached to a rotating axle.</li> <li>• To know that an axle moves within an axle holder which is fixed to the vehicle or toy.</li> <li>• To know that the frame of a vehicle (chassis) needs to be balanced.</li> <li>• To know some real-life items that use wheels.</li> </ul>	<ul style="list-style-type: none"> <li>• To understand that the shape of materials can be changed to improve the strength and stiffness of structures.</li> <li>• To understand that axles are used in structures and mechanisms to make parts turn in a circle.</li> <li>• To begin to understand that different structures are used for different purposes.</li> <li>• To know that a structure is something that has been made and put together.</li> </ul>
<p><b>Key Vocabulary</b></p>	<p>Design, Model, Assemble, Mechanism, Test.</p>	<p>Axle, Chassis, Mechanism, Diagram, Equipment, Wheel</p>	<p>Axle, Structure, Model, Strong, Weak</p>
<p><b>Links to previous learning</b></p>	<p>Reception – Traditional tales</p>	<p>Reception – Modes of transport Y1 – Mechanisms: Story Books</p>	<p>Reception – Weather/Investigating Materials Y1 – Science: Seasonal Changes Winter-Spring</p>
<p><b>Cross Curricular Links</b></p>	<p>English – Traditional tales</p>	<p>History – Toys</p>	<p>Geography/History – Seaside Science – Everyday Materials Maths – Geometry: Shapes History – Toys</p>