



# St Leo's and Southmead Catholic Nursery and Primary School

## Design and Technology Progression of Knowledge

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	Paper toy Lighthouse Keeper's plate Playground equipment	Puppets Moon buggy Sandwiches	Cushion Jewellery box Moving monster	Kite Alarmed lunchbox Pizza	Bread Bridges Cams	Lights Soft toy Shelter to storm
<b>Design</b>	<p>Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and technology and communication technology</p> <p>Explore and evaluate a range of existing products in the context of evaluating the plate used for his lunch What materials are used to make</p>	<p>Puppets are figures or dolls that can be moved by a person Design purposeful, functional, appealing products for himself/herself and other users based on design criteria</p> <p>Use labelled drawings to record features upon existing vehicles and their purpose Designs can be created after</p>	<p>Generate ideas for products after thinking about who will use them and what they will be used for</p> <p>Sketch designs- which do they prefer?</p> <p>To investigate a variety of familiar objects that use air to make them work To investigate techniques for making simple pneumatic systems To gather ideas for creating a moving monster</p>	<p>The history of kites Design of kites How kites fly The parts of the kite and their jobs Use knowledge of existing products to design a functional and appealing kite for a particular purpose and audience Create designs using exploded diagram</p> <p>To look at toys with alarms/ lunch box designs to influence their own design.</p>	<p>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</p> <p>Develop a clear idea of what has to be done. Use results of investigations, information sources, including ICT when developing design</p>	<p>Generate, develop, model and communicate his/her ideas through discussion, annotated sketches, cross-sectional and exploded diagrams</p>

*'Nurture, Inspire, Succeed'*



**Design and Technology Progression of Knowledge**

	<p>different plates? Draw designs for plates on a paper plate</p> <p>Identify different pieces of playground equipment Make careful observations of playground equipment Draw and label different pieces of playground equipment Choose appropriate materials and explore different ways of combining them for a particular purpose Draw labelled diagrams of their designs Describe the materials and</p>	<p>exploring existing vehicles and using a design criteria</p> <p>To know where and how a variety of ingredients are grown, reared, caught and processed Taste a selection of breads and other ingredients in order to select those to be used in the final product A design is a plan or drawing of something that you intend to make To design a sandwich including using foods from at least three different food groups</p>		<p>Use research and develop design criteria to inform the design of their pizza Develop their ideas for a pizza through discussion, and annotated sketches</p>		
--	--	---	--	--	--	--



# St Leo's and Southmead Catholic Nursery and Primary School

## Design and Technology Progression of Knowledge

	tools they will need to create their model.					
<b>Make</b>	<p>Select from and use a range of tools and equipment to perform practical tasks such as cutting, shaping, joining and finishing</p> <p>How to mould clay into plate designs</p> <p>Follow their designs to create their playground equipment</p> <p>Identify and investigate ways of strengthening their models to make them sturdy</p> <p>Join materials together appropriately to create sturdy</p>	<p>Puppets can be different in size, shape and the materials used to create the puppet</p> <p>Sewing can be used to join two or more materials together</p> <p>A template can be used as a pattern for cutting out a design</p> <p>To measure, draw and cut materials needed to make different parts</p> <p>Materials can be joined together using different tools and methods to create a vehicle</p> <p>Washing hands</p>	<p>Select appropriate tools and techniques for making their product</p>	<p>Use techniques which require more accuracy to cut, shape, join and finish his/her work e.g. cutting internal shapes, slots in frameworks</p> <p>To select different materials to make a lunchbox considering availability</p>	<p>Make careful and precise measurements so that joins, holes and openings are in exactly the right place</p>	<p>Use technical knowledge to problem solve during the making process</p> <p>Use a wide range of methods to strengthen, stiffen and reinforce complex structures and can use them accurately and appropriately</p>



# St Leo's and Southmead Catholic Nursery and Primary School

## Design and Technology Progression of Knowledge

	structures Decorate their playground equipment to make them look aesthetically pleasing	with warm water and soap should be done before, during and after preparing food Choose the right equipment to chop, grate, slice and spread the ingredients selected				
<b>Evaluate</b>	Explore and evaluate a range of existing products Evaluate their ideas and products against design criteria  How to make plates even better? Are the plates suitable for the Lighthouse Keeper?  Know what evaluation is, and	The appearance of a puppet reflects its intended purpose Evaluate and assess existing products and those that he/she has made using a design criteria	Reflect on the progress of their work as they design and make, identifying ways they could improve their products	Consider how existing products and his/her own finished products might be improved and how well they meet the needs of the intended user  Evaluate their own and other pizza by reflecting on their original plans- what do their pizzas look and taste like?	Make detailed evaluations about existing products and his/her own considering views of others to improve his/her work  Personally evaluate the product and seek the thought of others.	Apply his/her knowledge of materials and techniques to refine and rework his/her product to improve its functional properties and aesthetic qualities



# St Leo's and Southmead Catholic Nursery and Primary School

## Design and Technology Progression of Knowledge

	<p>why it is important Evaluate their own finished playground equipment fairly and make comments</p>					
<p><b>Technical Knowledge</b></p>	<p>Explore and use mechanisms, such as levers, sliders, wheels and axles, in their products</p> <p>What does the Lighthouse Keeper eat for his lunch?</p>	<p>Puppets are made up of different parts To know different sewing stitches to attach a variety of materials together to make a puppet</p> <p>There are many types of vehicles which can be used for different purposes Vehicles are made up of different parts, these include a chasis, wheels, axel and steering wheel</p>	<p>Recognise that the quality of a product depends on how well it is made and how well it meets its intended purpose How materials can be combined and mixed to create more useful properties</p>	<p>Use knowledge of techniques and the functional and aesthetic qualities of a wide range of materials to plan how to use them</p>	<p>Understand how to use more complex mechanical systems</p> <p>Apply basic rules of food hygiene and other safe practices relating to the preparation of food.</p>	<p>Apply his/her understanding of computing to program, monitor and control his/her product</p>



# St Leo's and Southmead Catholic Nursery and Primary School

## Design and Technology Progression of Knowledge

		<p>A sandwich is an item of food with fillings enclosed between two pieces of bread There are many different types of sandwiches. There are 5 main food groups- fruit and vegetables, carbohydrates, proteins, dairy and fats and sugars. In order to stay healthy it is important that we eat a balanced diet of foods from each of the five food groups To understand the need for a variety of food in a diet</p>				
--	--	--	--	--	--	--