



## Design & Technology Long Term Plan:

	<b>Autumn 1</b>	<b>Autumn 2</b>	<b>Spring 1</b>	<b>Spring 2</b>	<b>Summer 1</b>	<b>Summer 2</b>
<b>Year 1</b>	<p><b>Cooking and Nutrition - Fruit Kebabs</b></p> <p>Designing and making with food</p> <p>Understanding Health and nutrition</p> <p>Combining tastes and textures to make a product</p> <p>Using basic cutting tools</p>		<p><b>Castles (Static Structures) - Castles</b></p> <p>creating models from sheet and reclaimed materials</p> <p>Understand about basic structures and how they can be made stronger/more stable</p> <p>Use range of fixing techniques</p>		<p><b>Mechanisms – Pushes , pulls and levers - Transport</b></p> <p>Understand simple mechanisms that create movement e.g. simple levers and sliders</p> <p>A book with moving parts</p>	
<b>Year 2</b>	<p><b>Textiles- Marking out and joining fabric - Finger puppets (animals)</b></p> <p>Making a textile product by marking</p>		<p><b>Mechanisms – wheels, axels, pulleys and levers - fire engine</b></p> <p>joining materials with moving joints</p>		<p><b>Textiles – using a paper pattern, joining fabric - Space suit for an Astronaut</b></p>	



	out, cutting and joining fabric		Understand how wheels and axels work Understand winding mechanisms Moving Vehicle		Use a graphics programme to design a space suit Use a simple paper pattern to draw around and cut out fabric Use simple joining techniques	
<b>Year 3</b>	<b>Free Standing Structures - Photo frame (as a present)</b>  Understanding ways in which structures can be made stable Understand how to stiffen materials		<b>Mechanisms and control – pneumatics -</b> Moving Monster Consider different types of pneumatic structures Know about the movement of simple mechanisms , such as levers and linkages		<b>Cooking and Nutrition - A Greek Salad</b>  Food preparation techniques Combining appearance, flavour and texture Understand the balanced plate model for healthy eating	
<b>Year 4</b>	<b>Mechanisms – linkages - Pop Up</b>		<b>Textiles- reinforcing fabric - Purse for the Rio carnival</b>		<b>Electrical Control - artefact</b>	



	<p>Book with moving parts (Guide To The Rainforest)</p> <p>Understand how a range of linkage type mechanisms work</p> <p>Assemble a range of mechanisms including pop ups, spinners, sliders, levers and tabs</p> <p>And apply to the design of a pop up book</p>		<p>Investigate ways of reinforcing fabric – e.g. over stitching, running stitch</p> <p>Create and use a pattern</p> <p>Develop decorative techniques and fastenings e.g. applique</p>		<p>Draw on understanding of simple electrical circuits and switches</p> <p>Join components, cut and shape material with precision</p> <p>An alarm system for a precious</p>	
<b>Year 5</b>	<p><b>Structures -Musical Instruments - Rainmaker</b></p> <p>Investigate instruments from different times and cultures</p> <p>Understand how shape and materials</p>		<p><b>Mechanisms - Moving Toys using cams, wheels and axels - Roman siege machines</b></p> <p>Understand how mechanisms can be</p>		<p><b>Cooking and Nutrition - Making Bread</b></p> <p>Understand the function and properties of materials</p>	



	<p>used can alter sound</p> <p>Investigate a range of finishing techniques</p>		<p>used to produce movement</p> <p>Cut, shape and join components, selecting tools for a specific purpose</p>		<p>Identify, select and use food tools and techniques safely</p> <p>Understand food hygiene</p>	
<p><b>Year 6</b></p>	<p><b>Structures - Design and build an aqueduct</b></p> <p>Understand why structures sometimes fail</p> <p>Investigate and use techniques to reinforce and strengthen structures</p> <p>Design and make a structure for a specific tasks</p>		<p><b>Mechanisms – Electrical and computer control</b></p> <p>Understand how products can be driven by electricity</p> <p>Use motors to control speed and direction of movement</p> <p>Develop structures with cladding and finishing techniques</p>		<p><b>Textiles (T Shirts)</b></p> <p>Design for a range of needs – appearance, safety, size, warmth</p> <p>Use patterns, templates and detailed working drawings</p> <p>Develop finishing techniques</p>	