

DT Long Term Plan

Year						
EYFS	Autumn 1 – All about me	Autumn 2 – Terrific tales	Spring 1 – Amazing Animals	Spring 2 Come outside	Summer 1 Ticket to ride	Summer 2 Under the sea
	Use construction kits and bricks to create structures Using range of tools Joining paper and card	Using 3d boxes and contains to create own product	Using range of tools Developed some cutting, joining and finishing skills with card.	Gained some experience of designing, making and evaluating products for a specified user and purpose	Assembled vehicles with moving wheels using construction kits. Explored moving vehicles through play.	Experience of common fruit and vegetables, undertaking sensory activities i.e. appearance taste and smell. Experience of cutting soft fruit and vegetables using appropriate utensils. make simple flaps

	Autumn 2	Spring 2	Summer 2
1	<p>Mechanisms</p> <p>Sliders and levers Explore and uses sliders and levers Understand that different mechanics create different movements</p> <p>Design, Make, Evaluate a product using paper and card which creates movement with a slider and lever mechanism</p>	<p>Food and Nutrition</p> <p>Preparing fruit and vegetables Learn to distinguish between fruit and vegetables and where they grow.</p> <p>Design, make and evaluate a smoothie using either fruit or vegetables</p>	<p>Materials and Structures</p> <p>Freestanding structures Know how to make free standing structures stronger, stiffer and more stable.</p> <p>Design, make and evaluate a free standing structure</p>
2	<p>Food and Nutrition</p> <p>Understand and use basic principles of a healthy and varied diet to prepare dishes, (carbohydrates, proteins, fruits and vegetables, dairy, oils and spreads)</p> <p>Design, make, evaluate a healthy wrap</p>	<p>Textiles</p> <p>Templates and joining techniques Understand how simple 3-D textile products are made, using a template to create two identical shapes. Understand how to join fabrics using different techniques e.g.</p>	<p>Mechanisms</p> <p>Wheels and axles Explore and use wheels, axles and axle holders. Distinguish between fixed and freely moving axles.</p> <p>Design, make and evaluate a vehicle which moves due to wheels and axles</p>

		<p>running stitch, glue, over stitch, stapling.</p> <p>Design, make, evaluate a 3d product using templates, textile and joining methods</p>	
3	<p>Mechanisms</p> <p>Levers and Link</p> <p>Understand and use lever and linkage mechanisms.</p> <p>Distinguish between fixed and loose pivots.</p> <p>Design, make, evaluate a product creates movement with a lever and linkage mechanism</p>	<p>Food and Nutrition</p> <p>Healthy and varied diet</p> <p>Know how to use appropriate equipment and utensils to prepare and combine food.</p> <p>Know about a range of fresh and processed ingredients appropriate for their product, and whether they are grown, reared or caught.</p> <p>Design, make and evaluate a bread based product with a healthy</p>	<p>Electrical systems</p> <p>Simple circuits and switches</p> <p>Understand and use electrical systems in their products, such as series circuits incorporating switches, bulbs and buzzers.</p> <p>Design, make evaluate a battery-powered product with a switch</p>

		filling combing ingredients	
4	<p>Textiles</p> <p>3D product with a fastening Know what fastenings can be used in a textile product Understand how to securely join two pieces of fabric together. Understand the need for patterns and seam allowances. Design, make evaluate a textile product with a fastening</p>	<p>Mechanisms</p> <p>Pneumatics Understand and use pneumatic mechanisms. Design, make and evaluate a product that creates movement with a pneumatic system</p>	<p>Structures</p> <p>Shell structure Develop and use knowledge of how to construct strong, stiff shell structures. Develop and use knowledge of nets of cubes and cuboids and, where appropriate, more complex 3D shapes. Design, make evaluate a product that requires a shell structure</p>
5	<p>Textiles</p> <p>Combining different fabric shapes A 3-D textile product can be made from a combination of accurately made pattern pieces, fabric shapes and different fabrics. Fabrics can be strengthened, stiffened and reinforced where appropriate.</p>	<p>Food and Nutrition</p> <p>Healthy and varied diet Know how to use utensils and equipment including heat sources to prepare and cook food. Design, make and evaluate a yeast based healthy snack</p>	<p>Electrical systems</p> <p>More complex switches Understand and use complex switch electrical systems in products. Design, make evaluate a battery powered product with a complex switch system</p>

	Design, make evaluate a textile product that uses two different types of fabrics		
6	<p>Food and Nutrition</p> <p>Celebrating culture and seasonality (food)</p> <p>Understand about seasonality in relation to food products and the source of different food products.</p> <p>.Design, make and evaluate a three-course menu focused on three key ingredients, exploring culture and seasonality</p>	<p>Mechanisms</p> <p>Cams</p> <p>Understand that mechanical systems have an input, process and an output. Understand how cams can be used to produce different types of movement and change the direction of movement.</p> <p>Design, make, evaluate a product creates movement and change of direction with cams</p>	<p>Structures</p> <p>Frame structures</p> <p>Understand how to strengthen, stiffen and reinforce 3-D frameworks.</p> <p>Design, Make and evaluate a frame structure using wood</p>