



DT Long Term Plan Pencoys Primary School



	Autumn	Spring	Summer
YN	Explore different materials freely to develop their ideas about how to use them and what to make	Develop their own ideas and then decide which materials to use to express them	Join different materials and explore different textures
YR	Mechanisms DT Association: Hinges and Catches (make special box for a family member)	Mechanisms DT Association: Let's Look at Vehicles	Food DT Association: Fantastic Fruit
	Structures DT Association: Let's Look at Hats (Christmas Party Hats)	Structures DT Association: Let's Look at Products (Cups)	Food DT: Design and make an ice-cream sundae
Y1	What foods should we eat for a healthy diet?	What is a bridge and how are they built?	How can I join different materials together to make a product?
	Food <ul style="list-style-type: none"> diet - healthy foods taste exploring of different fruits and vegetables cutting, peeling, slicing techniques design, make and evaluate product and process 	Structures <ul style="list-style-type: none"> investigate different types of free -standing structures (bridges focus) explore construction/ joining techniques design, make and evaluate product and process 	Textiles puppets - <ul style="list-style-type: none"> investigate puppets as a product explore joining techniques for fabric create and use templates design, make and evaluate product and process
	<u>Cross curricular links:</u>	<u>Cross curricular links:</u>	<u>Cross curricular links:</u> History - Punch and Judy
Y2	How do we make moving pictures?	How do I prepare fruit and Vegetables?	How can a toy move?
	Mechanisms <ul style="list-style-type: none"> Sliders and levers Moving picture designs 	Food <ul style="list-style-type: none"> Cutting, peeling, slicing techniques How do fruit and Vegetables grow? Why are these healthy foods? 	Mechanisms <ul style="list-style-type: none"> Wheels and Axles Recycled moving toys
	<u>Cross curricular links:</u>	<u>Cross curricular links:</u> Geography – fruits growing in the Caribbean	<u>Cross curricular links:</u> Geography – Africa
Y3	How do I use a net to create a package?	How can we link levers to make a ___ move?	Where does our food come from?
	Structures <ul style="list-style-type: none"> Shell structures 	Mechanisms <ul style="list-style-type: none"> Levers and linkages 	Food <ul style="list-style-type: none"> Food groups



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	<ul style="list-style-type: none"> • 3D shapes using nets • CAD • Scoring, folding and cutting 	<ul style="list-style-type: none"> • Pivots 	<ul style="list-style-type: none"> • Food sources: fresh, reared, caught (link to Farm to Fork trip) • Preparation of ingredients e.g. cutting , grating, chopping.
	<p><u>Cross curricular links:</u> Ancient Egypt</p>	<p><u>Cross curricular links:</u> Stone Age</p>	<p><u>Cross curricular links:</u></p>
Y4	<p>What is the best design for a Maya bag?</p> <p>Textiles</p> <ul style="list-style-type: none"> • 2D to 3D designs • Design, make and evaluate a purposeful product using joined fabric shapes • Create and use templates to cut fabric • Join two pieces of fabric choosing the most appropriate stitch 	<p>How do I make the torch light up?</p> <p>Electrical Systems</p> <ul style="list-style-type: none"> • Design, make and evaluate a purposeful electrical system. • Incorporate series circuits into product including switches and bulbs. • Investigate use of computer programming to control bulbs. 	<p>Can processed foods be healthy?</p> <p>Food</p> <ul style="list-style-type: none"> • Healthy and varied diet • Fresh vs processed ingredients • Design, make and evaluate a food product. • What makes it healthy? • Choose utensils to prepare and combine food.
	<p><u>Cross curricular links:</u> History: Maya</p>	<p><u>Cross curricular links:</u> Science: electricity</p>	<p><u>Cross curricular links:</u></p>
Y5	<p>How can I join fabrics effectively?</p> <p>Textiles</p> <ul style="list-style-type: none"> • Design, make and evaluate a purposeful product using joined fabric shapes. • Develop stitches to include more than one type for joining and embellishment • Include a means of fastening e.g. Velcro, ties and buttons. 	<p>How can I use IT to help me design and make a strong frame structure?</p> <p>Structures</p> <ul style="list-style-type: none"> • Design, make and evaluate a purposeful, strong and stable 3D framed structure. • Use a range of joining techniques appropriate to the materials and structure. • Use CAD to aid designing 	<p>Where does our food come from?</p> <p>Food - local</p> <ul style="list-style-type: none"> • Design, make and evaluate a food product which celebrates seasonality. • Demonstrate knowledge of how to use utensils and equipment (including heat sources) to prepare and cook food.
	<p><u>Cross curricular links:</u></p>	<p><u>Cross curricular links:</u> Computing – use of CAD packages</p>	<p><u>Cross curricular links:</u> Science – changes and properties of materials</p>



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Y6	How can I make a vehicle drive?	How can electrical systems improve products?	How can food celebrate culture?
	Pulleys and Gears <ul style="list-style-type: none">• Design, make and evaluate a vehicle powered by a pulley system with an electrical circuit.• Use a range of joining techniques to create a chassis that can support a pulley system.• Select and use tools and materials to create a well-finished product.	Electrical systems (monitoring and control) <ul style="list-style-type: none">• Design, make and evaluate a product that incorporates electrical sensors that respond to changes in the environment.• Write programs that include inputs and outputs.	Food – culture <ul style="list-style-type: none">• Design, make and evaluate a product that celebrates culture e.g. pasties• Understand how and why food is important to culture.• Demonstrate knowledge of how to use utensils and equipment (including heat sources) to prepare and cook food.
	<u>Cross curricular links:</u>	<u>Cross curricular links:</u> Computing Aut 2 (Y6 sensing movement outputs and sensors)	<u>Cross curricular links:</u>