

Primary Phase Curriculum Map



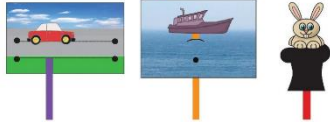



Subject Area:




Design & Technology

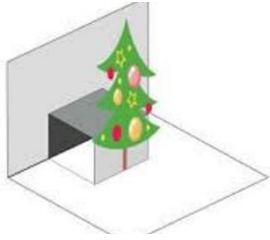

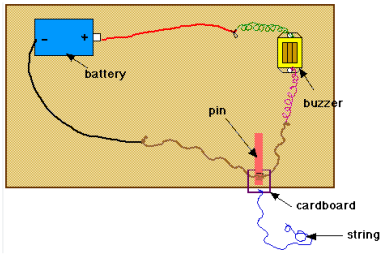





<u>Year Group</u>	<u>Autumn Term</u>	<u>Spring Term</u>	<u>Summer Term</u>
Year 1	Cooking and Nutrition – Fruit Kebabs	Static Structures – Castles	Mechanisms – A picture with moving parts (sliders and levers)
Year 2	Cooking and Nutrition – Pizza	Mechanisms – A fire truck	Textiles – A Space Suit
Year 3	Free-standing Structures – Photo Frames	Mechanisms- Moving Monsters	Cooking and Nutrition- Greek Salad
Year 4	Mechanisms – Pop-up Book	Textiles – Money-holders	Electrical systems- Alarm system
Year 5	Structures – Rainmakers	Mechanisms- Moving Toys	Cooking and Nutrition – Bread
Year 6	Structures – Aqueducts	Mechanisms & Electrical Control – Moving Electrical Toys	Textiles – T-shirts




	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Nursery 2	<p><u>Expressive Arts and design</u></p> <p>Express ideas through making marks sometimes giving meaning to the marks they make</p>		<p><u>Expressive Arts and design</u></p> <p>Manipulate and play with different materials to create a desired effect</p>		<p><u>Expressive Arts and design</u></p> <p>Continue to develop manipulation and control of small motor skills</p> <p>Express ideas through making marks sometimes giving meaning to the marks they make</p>	
Nursery 3-4	<p>Expressive Arts and Design</p> <p>Create closed shapes with continuous lines and begin to use these shapes to represent objects. Join different materials and explore different textures. Begin to develop complex stories using small world equipment like animal sets, dolls and dolls houses etc. Make imaginative and complex 'small worlds' with blocks and construction kits, such as a city with different buildings and a park.</p>		<p><u>Expressive Arts and design</u></p> <p>Explore different materials freely, in order 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.</p>		<p><u>Expressive Arts and design</u></p> <p>Join different materials and explore different textures. Create closed shapes with continuous lines and begin to use these shapes to represent objects.</p>	
FS2	<p><u>Expressive Arts and design</u></p> <p>Develop storylines in their pretend play. Explore, use and refine a variety of artistic effects to express their ideas and feelings.</p>		<p><u>Expressive Arts and design</u></p> <p>Explore different materials freely, in order to develop their ideas about how to use them and what to make. Join different materials and explore different textures.</p>		<p><u>Expressive Arts and design</u></p> <p>Explore different materials freely, in order to develop their ideas about how to use them and what to make. Join different materials and explore different textures.</p>	
Year 1	<p>Cooking & nutrition</p> <p>Designing and making with food Understanding Health and nutrition Combining tastes and textures to make a product Using basic cutting tools Fruit kebabs https://www.youtube.com/watch?v=XBAmULUqJ8M</p>		<p>Static Structures</p> <p>Creating models from sheet and reclaimed materials Understand about basic structures and how they can be made stronger/more stable Use range of fixing techniques Castles https://www.youtube.com/watch?v=HGH2bteGpTA</p>		<p>Mechanisms: Pushes, pulls and levers</p> <p>Understand simple mechanisms that create movement e.g., simple levers and sliders</p> <p>A picture with moving parts (transport)</p>	

			<p style="text-align: center;">Moving Pictures</p>  <p style="text-align: center;">Sliders and Levers</p>
<p style="text-align: center;">National Curriculum Links (KS1)</p>	<ul style="list-style-type: none"> • use the basic principles of a healthy and varied diet to prepare dishes • understand where food comes from. 	<p style="text-align: center;"><u>Design:</u></p> <ul style="list-style-type: none"> • generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology <p style="text-align: center;"><u>Make:</u></p> <ul style="list-style-type: none"> • select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately <p style="text-align: center;"><u>Evaluate:</u></p> <ul style="list-style-type: none"> • evaluate their ideas and products against their own design criteria and consider the views of others to improve their work 	<p style="text-align: center;"><u>Design:</u></p> <ul style="list-style-type: none"> • design purposeful, functional, appealing products for themselves and other users based on design criteria <p style="text-align: center;"><u>Make:</u></p> <p>select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]</p> <p style="text-align: center;"><u>Evaluate:</u></p> <ul style="list-style-type: none"> • explore and evaluate a range of existing products
<p style="text-align: center;">Year 2</p>	<p style="text-align: center;">Cooking and nutrition</p> <p>Understand that all food comes from plants or animals. Demonstrate how to prepare simple dishes safely and hygienically, without using a heat source. Demonstrate how to use techniques such as cutting, peeling and grating.</p> <p style="text-align: center;">Pizza</p> 	<p style="text-align: center;">Mechanisms: Wheels, axels, pulleys and levers</p> <p>Joining materials with moving joints Understand how wheels and axels work Understand winding mechanisms</p> <p style="text-align: center;">Moving vehicle (fire engine)</p> <p>https://www.youtube.com/watch?v=-iL3-eTwWBw</p> 	<p style="text-align: center;">Textiles: Using a paper pattern, joining fabric</p> <p>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</p> <p style="text-align: center;">Space suit for an Astronaut</p> 
		<p style="text-align: center;"><u>Design:</u></p>	<p style="text-align: center;"><u>Design:</u></p>

<p>National Curriculum Links (KS1)</p>	<ul style="list-style-type: none"> • use the basic principles of a healthy and varied diet to prepare dishes • understand where food comes from. 	<ul style="list-style-type: none"> • design purposeful, functional, appealing products for themselves and other users based on design criteria <u>Make:</u> • select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] <u>Evaluate:</u> • explore and evaluate a range of existing products 	<ul style="list-style-type: none"> • generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology <u>Make:</u> • select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately <u>Evaluate:</u> • evaluate their ideas and products against their own design criteria and consider the views of others to improve their work
<p>Year 3</p>	<p>Free Standing Structures Understanding ways in which structures can be made stable Understand how to stiffen materials Photo frame (as a present) https://www.youtube.com/watch?v=ZCXd_KyXuug</p> 	<p>Mechanisms and control: Pneumatics Consider different types of pneumatic structures Know about the movement of simple mechanisms, such as levers and linkages Moving Monster https://www.youtube.com/watch?v=5QqinOcbIM</p> 	<p>Cooking & nutrition Food preparation techniques Combining appearance, flavour and texture Understand the balanced plate model for healthy eating A Greek Salad https://www.youtube.com/watch?v=j7rU-1-s7NM</p> 
<p>National Curriculum Links (KS2)</p>	<p><u>Design:</u></p> <ul style="list-style-type: none"> • use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups <u>Make:</u> • select from and use a wider range of tools and equipment to perform practical tasks 	<p><u>Design:</u></p> <ul style="list-style-type: none"> • generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design <u>Make:</u> 	<ul style="list-style-type: none"> • understand and apply the principles of a healthy and varied diet • prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques • understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed

	<p>[for example, cutting, shaping, joining and finishing], accurately</p> <p><u>Evaluate:</u></p> <ul style="list-style-type: none"> evaluate their ideas and products against their own design criteria and consider the views of others to improve their work 	<ul style="list-style-type: none"> select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately <p><u>Evaluate:</u></p> <ul style="list-style-type: none"> evaluate their ideas and products against their own design criteria and consider the views of others to improve their work 	
<p>Year 4</p>	<p>Mechanisms: Linkages</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>Apply to the design of a pop-up book</p> <p><i>Pop Up Book with moving parts (Guide to The Rainforest)</i></p> 	<p>Textiles: Reinforcing fabric</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><i>Money-holder for the Rio carnival</i></p> <p>https://www.youtube.com/watch?v=9RfGOBStAf0</p> 	<p>Electrical Control</p> <p>Draw on understanding of simple electrical circuits and switches</p> <p>Join components, cut and shape material with precision</p> <p><i>An alarm system (Science link)</i></p> 
<p>National Curriculum Links (KS2)</p>	<p><u>Design:</u></p> <ul style="list-style-type: none"> generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design <p><u>Make:</u></p> <ul style="list-style-type: none"> select from and use a wider range of tools and equipment to perform practical tasks 	<p><u>Design:</u></p> <ul style="list-style-type: none"> use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups <p><u>Make:</u></p> <ul style="list-style-type: none"> select from and use a wider range of materials and components, including construction materials, textiles and 	<p><u>Design:</u></p> <ul style="list-style-type: none"> use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups <p><u>Make:</u></p> <ul style="list-style-type: none"> select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately

	<p>[for example, cutting, shaping, joining and finishing], accurately</p> <p><u>Evaluate:</u></p> <ul style="list-style-type: none"> evaluate their ideas and products against their own design criteria and consider the views of others to improve their work 	<p>ingredients, according to their functional properties and aesthetic qualities</p> <p><u>Evaluate:</u></p> <ul style="list-style-type: none"> investigate and analyse a range of existing products evaluate their ideas and products against their own design criteria and consider the views of others to improve their work 	<p><u>Evaluate:</u></p> <ul style="list-style-type: none"> investigate and analyse a range of existing products evaluate their ideas and products against their own design criteria and consider the views of others to improve their work
<p>Year 5</p>	<p>Structures: Musical instruments Investigate instruments from different times and cultures Understand how shape and materials used can alter sound Investigate a range of finishing techniques</p> <p>Rainmaker https://www.youtube.com/watch?v=e2fkrTBmSGA</p> 	<p>Mechanisms: Moving toys using cams, wheels and axels Understand how mechanisms can be used to produce movement Cut, shape and join components, selecting tools for a specific purpose</p> <p>Moving Toy https://www.youtube.com/watch?v=rHyCVLe8Bvw</p> 	<p>Cooking and Nutrition Understand the function and properties of materials Identify, select and use food tools and techniques safely Understand food hygiene</p> <p>Making bread https://www.bbc.co.uk/food/recipes/paul_hollywoods_crusty_83536</p> 
<p>National Curriculum Links (KS2)</p>	<p><u>Design:</u></p> <ul style="list-style-type: none"> use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups <p><u>Make:</u></p> <ul style="list-style-type: none"> select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately <p><u>Evaluate:</u></p>	<p><u>Design:</u></p> <ul style="list-style-type: none"> generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design <p><u>Make:</u></p> <ul style="list-style-type: none"> select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately 	<ul style="list-style-type: none"> understand and apply the principles of a healthy and varied diet <ul style="list-style-type: none"> prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques understand seasonality and know where and how a variety of ingredients are grown, reared, caught and processed.

	<ul style="list-style-type: none"> evaluate their ideas and products against their own design criteria and consider the views of others to improve their work 	<p>Evaluate:</p> <ul style="list-style-type: none"> evaluate their ideas and products against their own design criteria and consider the views of others to improve their work 	
Year 6	<p>Structures</p> <p>Understand why structures sometimes fail Investigate and use techniques to reinforce and strengthen structures Design and make a structure for a specific tasks Design and build an aqueduct https://www.teachengineering.org/activities/view/cub_brid_lesson01_activity2</p> 	<p>Mechanisms: electrical and computer control</p> <p>Understand how products can be driven by electricity Use motors to control speed and direction of movement Develop structures with cladding and finishing techniques Electrical Boat https://www.youtube.com/watch?v=WetQf8bhkPQ</p> 	<p>Textiles</p> <p>Design for a range of needs – appearance, safety, size, warmth Use patterns, templates and detailed working drawings Develop finishing techniques T Shirts</p> 
National Curriculum Links (KS2)	<p>Design:</p> <ul style="list-style-type: none"> use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups <p>Make:</p> <ul style="list-style-type: none"> select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities <p>Evaluate:</p>	<p>Design:</p> <ul style="list-style-type: none"> use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups <p>Make:</p> <ul style="list-style-type: none"> select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities <p>Evaluate:</p>	<p>Design:</p> <ul style="list-style-type: none"> use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups <p>Make:</p> <ul style="list-style-type: none"> select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately <p>Evaluate:</p> <ul style="list-style-type: none"> evaluate their ideas and products against their own design criteria and consider the views of others to improve their work

	<ul style="list-style-type: none"> • evaluate their ideas and products against their own design criteria and consider the views of others to improve their work <ul style="list-style-type: none"> • understand how key events and individuals in design and technology have helped shape the world 	<ul style="list-style-type: none"> • evaluate their ideas and products against their own design criteria and consider the views of others to improve their work 	
<p style="text-align: center;">KS3</p>	<p style="text-align: center;"><u>Cooking and Nutrition</u></p> <ul style="list-style-type: none"> • understand and apply the principles of nutrition and health • cook a repertoire of predominantly savoury dishes so that they are able to feed themselves and others a healthy and varied diet • become competent in a range of cooking techniques [for example, selecting and preparing ingredients; using utensils and electrical equipment; applying heat in different ways; using awareness of taste, texture and smell to decide how to season dishes and combine ingredients; adapting and using their own recipes] • understand the source, seasonality and characteristics of a broad range of ingredients. 	<ul style="list-style-type: none"> • use research and exploration, such as the study of different cultures, to identify and understand user needs <ul style="list-style-type: none"> • identify and solve their own design problems and understand how to reformulate problems given to them • develop specifications to inform the design of innovative, functional, appealing products that respond to needs in a variety of situations • use a variety of approaches [for example, biomimicry and user-centred design], to generate creative ideas and avoid stereotypical responses • develop and communicate design ideas using annotated sketches, detailed plans, 3-D and mathematical modelling, oral and digital presentations and computer-based tools 	<ul style="list-style-type: none"> • select from and use specialist tools, techniques, processes, equipment and machinery precisely, including computer-aided manufacture • select from and use a wider, more complex range of materials, components and ingredients, taking into account their properties • analyse the work of past and present professionals and others to develop and broaden their understanding <ul style="list-style-type: none"> • investigate new and emerging technologies • test, evaluate and refine their ideas and products against a specification, taking into account the views of intended users and other interested groups • understand developments in design and technology, its impact on individuals, society and the environment, and the responsibilities of designers, engineers and technologists