



# CURRICULUM DEVELOPMENT

# DT RECEPTION



AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
	<p><b>Big Question:</b> Who am I and who is in my family?</p> <p><b>Overview of knowledge, understanding and skills (key concepts):</b> Children to begin exploring cutting, sticking and creating a planned piece of work. Children to create their own version of their family using junk modelling resources within the provision areas.</p>			<p><b>Big Question:</b> Who are the people that help us?</p> <p><b>Overview of knowledge, understanding and skills (key concepts):</b> Children to build different houses that they have seen in the community. Children to complete this within the junk modelling area of provision but children to plan and evaluate their designs.</p>	<p><b>Big Question:</b> Can I huff and puff and blow your house down?</p> <p><b>Overview of knowledge, understanding and skills (key concepts):</b> Children to create free standing structures and look at which structure is most robust and why.</p>



# CURRICULUM DEVELOPMENT

# DT YEAR 1



AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2	AREs
	<p><b>Big Question:</b> Why are some places in the world always hot and others always cold?</p> <p><b>Overview of knowledge, understanding and skills (key concepts):</b> Create a scene of a hot cold country and use sliders and levers to make the an element move. Children to understand that different mechanisms produce different types of movement.</p>			<p><b>Big Question:</b> What was my grandparents' childhood like?</p> <p><b>Overview of knowledge, understanding and skills (key concepts):</b> Children to make their own models of a toy that their grandparent used and show that they know how to make freestanding structures stronger, stiffer and more stable.</p>	<p><b>Big Question:</b> Where do and did the wheels on the bus go?</p> <p><b>Overview of knowledge, understanding and skills (key concepts):</b> Preparing Fruit and Vegetables - create a fruit salad for Nelson Mandela. Use simple utensils and equipment to peel, cut, slice, squeeze and chop safely.</p>	<p><b>By the end of KS1 children should be able to:</b></p> <p>DESIGN</p> <ul style="list-style-type: none"> <li>design purposeful, functional, appealing products for themselves and other users based on design criteria</li> <li>generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology</li> </ul> <p>COOKING AND NUTRITION</p> <ul style="list-style-type: none"> <li>use the basic principles of a healthy and varied diet to prepare dishes</li> <li>understand where food comes from.</li> </ul> <p>MAKE</p> <ul style="list-style-type: none"> <li>select from and use a range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing)</li> <li>select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics</li> </ul> <p>EVALUATE</p> <ul style="list-style-type: none"> <li>explore and evaluate a range of existing products</li> <li>evaluate their ideas and products against design criteria</li> </ul> <p>TECHNICAL KNOWLEDGE</p> <ul style="list-style-type: none"> <li>build structures, exploring how they can be made stronger, stiffer and more stable</li> <li>explore and use mechanisms (for example, levers, sliders, wheels and axles), in their products.</li> </ul>



# CURRICULUM DEVELOPMENT

# DT YEAR 2



AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2	AREs
			<p><b>Big Question:</b> What goes on at an airport or a train station?</p> <p><b>Overview of knowledge, understanding and skills (key concepts):</b> Explore and use wheels, axles and axle holders - children to explore how they could create an object to help move items across the airport or train station.</p>	<p><b>Big Question:</b> How did the Victorians influence our lives today?</p> <p><b>Overview of knowledge, understanding and skills (key concepts):</b> Children to create a bathing suit for Queen Victoria linking to using a template to create two identical shapes. Children to join fabric using different techniques such as running stitch, glue, over stitch, stapling.</p>		<p><b>By the end of KS1 children should be able to:</b></p> <p>DESIGN</p> <ul style="list-style-type: none"> <li>design purposeful, functional, appealing products for themselves and other users based on design criteria</li> <li>generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology</li> </ul> <p>COOKING AND NUTRITION</p> <ul style="list-style-type: none"> <li>use the basic principles of a healthy and varied diet to prepare dishes</li> <li>understand where food comes from.</li> </ul> <p>MAKE</p> <ul style="list-style-type: none"> <li>select from and use a range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing)</li> <li>select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics</li> </ul> <p>EVALUATE</p> <ul style="list-style-type: none"> <li>explore and evaluate a range of existing products</li> <li>evaluate their ideas and products against design criteria</li> </ul> <p>TECHNICAL KNOWLEDGE</p> <ul style="list-style-type: none"> <li>build structures, exploring how they can be made stronger, stiffer and more stable</li> <li>explore and use mechanisms (for example, levers, sliders, wheels and axles), in their products.</li> </ul>



# CURRICULUM DEVELOPMENT

## DT YEAR 3



AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2	AREs
	<p><b>Big Question:</b> How did Britain change between the beginning of the Stone Age and the end of the Iron Age?</p> <p><b>Overview of knowledge, understanding and skills (key concepts):</b> Children to create their own pencil case - children to show their understanding for the need of patterns and seam allowances.</p>	<p><b>Big Question:</b> How do we energise our homes and country?</p> <p><b>Overview of knowledge, understanding and skills (key concepts):</b> Children to make a card to share key facts about how to energise our homes - cards to show that children understand lever and linkage mechanisms and that they can distinguish between fixed and loose pivots.</p>				<p><b>By the end of KS2 children should be able to:</b></p> <p>DESIGN</p> <ul style="list-style-type: none"> <li>• 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</li> <li>• generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design</li> </ul> <p>COOKING AND NUTRITION</p> <ul style="list-style-type: none"> <li>• understand and apply the principles of a healthy and varied diet</li> <li>• prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques</li> <li>• understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.</li> </ul> <p>MAKE</p> <ul style="list-style-type: none"> <li>• select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing), accurately</li> <li>• 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</li> </ul> <p>EVALUATE</p> <ul style="list-style-type: none"> <li>• investigate and analyse a range of existing products</li> <li>• evaluate their ideas and products against their own design criteria and consider the views of others to improve their work</li> <li>• understand how key events and individuals in design and technology have helped shape the world</li> </ul> <p>TECHNICAL KNOWLEDGE</p> <ul style="list-style-type: none"> <li>• apply their understanding of how to strengthen, stiffen and reinforce more complex structures</li> <li>• understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]</li> <li>• understand and use electrical systems in their products (for example, series circuits incorporating switches, bulbs, buzzers and motors)</li> <li>• apply their understanding of computing to program, monitor and control their products</li> </ul>



# CURRICULUM DEVELOPMENT

## DT YEAR 4



AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2	AREs
	<p><b>Big Question:</b> Where would you choose to build a city?</p> <p><b>Overview of knowledge, understanding and skills (key concepts):</b> Children to create a 3-D textile pieces that has a combination of accurately made pattern pieces, fabric shapes and different fabrics. Children to create a piece of work that highlights their city.</p>			<p><b>Big Question:</b> How did Britain change between the end of the Iron Age and the end of the Roman occupation?</p> <p><b>Overview of knowledge, understanding and skills (key concepts):</b> Children to make their own electrical circuit that could represent the end of the Iron Age. Circuits to incorporate switches, bulbs and buzzers.</p>		<p><b>By the end of KS2 children should be able to:</b></p> <p>DESIGN</p> <ul style="list-style-type: none"> <li>• 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</li> <li>• generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design</li> </ul> <p>COOKING AND NUTRITION</p> <ul style="list-style-type: none"> <li>• understand and apply the principles of a healthy and varied diet</li> <li>• prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques</li> <li>• understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.</li> </ul> <p>MAKE</p> <ul style="list-style-type: none"> <li>• select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing), accurately</li> <li>• 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</li> </ul> <p>EVALUATE</p> <ul style="list-style-type: none"> <li>• investigate and analyse a range of existing products</li> <li>• evaluate their ideas and products against their own design criteria and consider the views of others to improve their work</li> <li>• understand how key events and individuals in design and technology have helped shape the world</li> </ul> <p>TECHNICAL KNOWLEDGE</p> <ul style="list-style-type: none"> <li>• apply their understanding of how to strengthen, stiffen and reinforce more complex structures</li> <li>• understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]</li> <li>• understand and use electrical systems in their products (for example, series circuits incorporating switches, bulbs, buzzers and motors)</li> <li>• apply their understanding of computing to program, monitor and control their products</li> </ul>



# CURRICULUM DEVELOPMENT

# DT YEAR 5



AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2	AREs
			<p><b>Big Question:</b> What are the main features of South America?</p> <p><b>Overview of knowledge, understanding and skills (key concepts):</b> Children to use their knowledge on frames and structures to create a feature of South America using joining techniques and triangulation.</p>		<p><b>Big Question:</b> What is Fairtrade and why should it matter to us?</p> <p><b>Overview of knowledge, understanding and skills (key concepts):</b> Children to create their own moving poster that includes cams, pulleys and gears that links to fairtrade.</p>	<p><b>By the end of KS2 children should be able to:</b></p> <p>DESIGN</p> <ul style="list-style-type: none"> <li>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</li> <li>generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design</li> </ul> <p>COOKING AND NUTRITION</p> <ul style="list-style-type: none"> <li>understand and apply the principles of a healthy and varied diet</li> <li>prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques</li> <li>understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.</li> </ul> <p>MAKE</p> <ul style="list-style-type: none"> <li>select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing), accurately</li> <li>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</li> </ul> <p>EVALUATE</p> <ul style="list-style-type: none"> <li>investigate and analyse a range of existing products</li> <li>evaluate their ideas and products against their own design criteria and consider the views of others to improve their work</li> <li>understand how key events and individuals in design and technology have helped shape the world</li> </ul> <p>TECHNICAL KNOWLEDGE</p> <ul style="list-style-type: none"> <li>apply their understanding of how to strengthen, stiffen and reinforce more complex structures</li> <li>understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]</li> <li>understand and use electrical systems in their products (for example, series circuits incorporating switches, bulbs, buzzers and motors)</li> <li>apply their understanding of computing to program, monitor and control their products</li> </ul>



# CURRICULUM DEVELOPMENT

## DT YEAR 6



AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2	AREs
<p><b>Big Question:</b> When and why was the British Empire created?</p> <p><b>Overview of knowledge, understanding and skills (key concepts):</b> Children to competently select and accurately assemble materials, and securely connect electrical components to produce a reliable, functional product. Children to create and modify a computer control program to enable their electrical product to respond to changes in the environment. Children to create their own board game that can include the above within an electrical circuit.</p>					<p><b>Big Question:</b> How do maps help us find our way around? (Y6+ Programme)</p> <p><b>Overview of knowledge, understanding and skills (key concepts):</b> Children to create their own bread/pizza/muffin/scones - looking at how yeast works and kneading.</p>	<p><b>By the end of KS2 children should be able to:</b></p> <p>DESIGN</p> <ul style="list-style-type: none"> <li>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</li> <li>generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design</li> </ul> <p>COOKING AND NUTRITION</p> <ul style="list-style-type: none"> <li>understand and apply the principles of a healthy and varied diet</li> <li>prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques</li> <li>understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.</li> </ul> <p>MAKE</p> <ul style="list-style-type: none"> <li>select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing), accurately</li> <li>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</li> </ul> <p>EVALUATE</p> <ul style="list-style-type: none"> <li>investigate and analyse a range of existing products</li> <li>evaluate their ideas and products against their own design criteria and consider the views of others to improve their work</li> <li>understand how key events and individuals in design and technology have helped shape the world</li> </ul> <p>TECHNICAL KNOWLEDGE</p> <ul style="list-style-type: none"> <li>apply their understanding of how to strengthen, stiffen and reinforce more complex structures</li> <li>understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]</li> <li>understand and use electrical systems in their products (for example, series circuits incorporating switches, bulbs, buzzers and motors)</li> <li>apply their understanding of computing to program, monitor and control their products</li> </ul>