


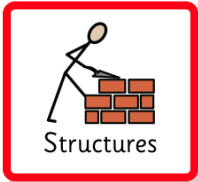
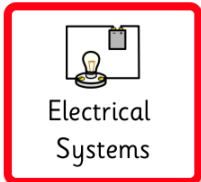
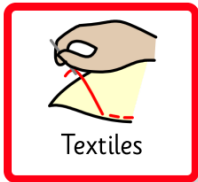


	Autumn	Spring	Summer
Reception	<p style="text-align: center;"><b>All about Me Celebrations and Christmas</b></p> <p><b>Design</b></p> <ul style="list-style-type: none"> <li>To work together to develop and realise creative ideas.</li> <li>To think about and discuss what they want to make.</li> <li>Look at products to generate inspiration and conversation about art and artists.</li> </ul> <p><b>Make</b></p> <ul style="list-style-type: none"> <li>Choose from range of materials for children to construct from.</li> </ul> <p><b>Evaluate</b></p> <ul style="list-style-type: none"> <li>Discuss problems and how they might be solved as they arise.</li> <li>Reflect with children on how they have achieved their aims.</li> </ul> <p><b>Technical knowledge</b></p> <ul style="list-style-type: none"> <li>Use different techniques for joining materials, such as how to use adhesive tape and different sorts of glue.</li> </ul>	<p style="text-align: center;"><b>People who help us Space and scientist – Building a rocket</b></p> <p><b>Design</b></p> <ul style="list-style-type: none"> <li>To work together to develop and realise creative ideas.</li> <li>To think about and discuss what they want to make.</li> <li>Look at products to generate inspiration and conversation about art and artists.</li> </ul> <p><b>Make</b></p> <ul style="list-style-type: none"> <li>Choose from range of materials for children to construct from.</li> </ul> <p><b>Evaluate</b></p> <ul style="list-style-type: none"> <li>Discuss problems and how they might be solved as they arise.</li> <li>Reflect with children on how they have achieved their aims.</li> </ul> <p><b>Technical knowledge</b></p> <p>Use different techniques for joining materials, such as how to use adhesive tape and different sorts of glue.</p>	<p style="text-align: center;"><b>Growing and changing Healthy fruit kebabs</b></p> <p><b>Design</b></p> <ul style="list-style-type: none"> <li>To work together to develop and realise creative ideas.</li> <li>To think about and discuss what they want to make.</li> <li>Look at products to generate inspiration and conversation.</li> </ul> <p><b>Make</b></p> <ul style="list-style-type: none"> <li>Choose from range of ingredients for children to construct from.</li> </ul> <p><b>Evaluate</b></p> <ul style="list-style-type: none"> <li>Discuss problems and how they might be solved as they arise.</li> <li>Reflect with children on how they have achieved their aims.</li> </ul> <p><b>Technical knowledge</b></p> <ul style="list-style-type: none"> <li>Use different techniques for joining materials, such as how to use adhesive tape and different sorts of glue.</li> </ul> <p><b>Cooking and Nutrition</b></p> <ul style="list-style-type: none"> <li>Talk about healthy food and unhealthy food.</li> <li>Talk about having a balance of these.</li> <li>Talk about likes and dislikes.</li> <li>Use a range of tools with care and precision.</li> </ul>

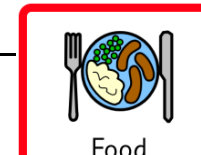
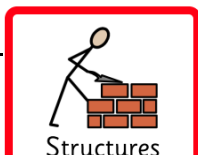
Year 1	Textiles – Hand Puppets	Structures – Windmills	Mechanisms – Make a Moving Picture
	<div data-bbox="472 215 667 395" data-label="Image"> </div> <p><b>Design</b></p> <ul style="list-style-type: none"> <li>To work together to develop and realise creative ideas.</li> <li>To think about and discuss what they want to make.</li> <li>Look at products to generate inspiration and conversation about art and artists.</li> </ul> <p><b>Make</b></p> <ul style="list-style-type: none"> <li>Choose from range of materials for children to construct from.</li> <li>Use a template to create a design for a puppet.</li> </ul> <p><b>Evaluate</b></p> <ul style="list-style-type: none"> <li>Discuss problems and how they might be solved as they arise.</li> <li>Reflect with children on how they have achieved their aims.</li> </ul> <p><b>Technical knowledge</b></p> <ul style="list-style-type: none"> <li>Use different techniques for joining materials, such as how to use adhesive tape and different sorts of glue.</li> <li>Cutting fabric neatly with scissors.</li> <li>Sequencing steps for construction.</li> </ul>	<div data-bbox="1115 215 1310 395" data-label="Image"> </div> <p><b>Design</b></p> <ul style="list-style-type: none"> <li>Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology</li> </ul> <p><b>Make</b></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,</li> </ul> <p><b>Evaluate</b></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><b>Technical knowledge</b></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> <li>Turning 2D nets into 3D structures.</li> <li>Following instructions to cut and assemble the supporting structure of a windmill.</li> </ul>	<div data-bbox="1753 215 1948 395" data-label="Image"> </div> <p><b>Design</b></p> <ul style="list-style-type: none"> <li>Designing a moving story book for a given audience.</li> <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.</li> </ul> <p><b>Make</b></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 and textiles.</li> <li>Following a design to create moving models that use levers and sliders.</li> </ul> <p><b>Evaluate</b></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> <li>Reviewing the success of a product by testing it with its intended audience.</li> </ul> <p><b>Technical knowledge</b></p> <ul style="list-style-type: none"> <li>Explaining how to adapt mechanisms, using bridges or guides to control the movement.</li> <li>Testing a finished product, seeing whether it moves as planned and if not, explaining why and how it can be fixed.</li> </ul>

Year 2	Mechanisms – Moving vehicle	Structures – Greenhouse	Food – Smoothies
	<div data-bbox="488 209 678 384" data-label="Image"> </div> <p data-bbox="309 371 398 400"><b>Design</b></p> <ul data-bbox="353 405 855 683" style="list-style-type: none"> <li>• Design functional, practical fire engine for a specific purpose.</li> <li>• Draw and labelling a fire engine using 2D shapes.</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 data-bbox="309 687 383 716"><b>Make</b></p> <ul data-bbox="353 721 844 970" style="list-style-type: none"> <li>• Select from and use a range of tools and equipment to perform practical tasks (cutting, shaping, joining and finishing).</li> <li>• Select from and use a wide range of materials and components, including construction materials and textiles.</li> <li>• Select from and use a wide range of materials and components,</li> </ul> <p data-bbox="309 975 421 1003"><b>Evaluate</b></p> <ul data-bbox="353 1008 846 1129" 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 data-bbox="309 1134 573 1163"><b>Technical knowledge</b></p> <ul data-bbox="353 1168 846 1481" 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> <li>• Turning 2D nets into 3D structures.</li> <li>• Following instructions to cut and assemble the supporting structure of a Fire engine.</li> </ul>	<div data-bbox="1120 209 1310 384" data-label="Image"> </div> <p data-bbox="869 371 958 400"><b>Design</b></p> <ul data-bbox="913 405 1527 624" style="list-style-type: none"> <li>• Designing a greenhouse with key features to appeal to a specific purpose.</li> <li>• Drawing and labelling a greenhouse using 2D shapes.</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 data-bbox="869 628 943 657"><b>Make</b></p> <ul data-bbox="913 662 1518 906" style="list-style-type: none"> <li>• Constructing a range of 3D geometric shapes using nets.</li> <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 and textiles.</li> </ul> <p data-bbox="869 911 981 940"><b>Evaluate</b></p> <ul data-bbox="913 944 1500 1034" 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 data-bbox="869 1038 1128 1067"><b>Technical knowledge</b></p> <ul data-bbox="913 1072 1512 1359" style="list-style-type: none"> <li>• Build structures, exploring how they can be made stronger, stiffer and more stable.</li> <li>• To understand that wide and flat based objects are more stable.</li> <li>• To understand materials are suitable for a greenhouse.</li> <li>• Turning 2D nets into 3D structures.</li> <li>• Following instructions to cut and assemble the supporting structure of a greenhouse.</li> </ul>	<div data-bbox="1742 209 1933 384" data-label="Image"> </div> <p data-bbox="1547 371 1637 400"><b>Design</b></p> <ul data-bbox="1592 405 2107 564" style="list-style-type: none"> <li>• To work together to develop and realise creative ideas.</li> <li>• To think about and discuss what they want to make.</li> <li>• Discuss a healthy diet to inform design.</li> </ul> <p data-bbox="1547 569 1621 598"><b>Make</b></p> <ul data-bbox="1592 603 2078 730" style="list-style-type: none"> <li>• Use the basic principles of a healthy and varied diet to prepare dishes.</li> <li>• Select from and use a range of tools and equipment to perform practical tasks.</li> </ul> <p data-bbox="1547 735 1666 764"><b>Evaluate</b></p> <ul data-bbox="1592 769 2078 890" 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 data-bbox="1547 895 1682 924"><b>Technical</b></p> <ul data-bbox="1592 928 2056 1152" style="list-style-type: none"> <li>• Understand where food comes from.</li> <li>• Talk about healthy food and unhealthy food.</li> <li>• Talk about having a balance of these.</li> <li>• Talk about likes and dislikes.</li> <li>• Use a range of tools with care and precision.</li> </ul>

Year 3	Pneumatics – Create a monster	Digital – E Charm	Food Technology – Pizza
	<div data-bbox="483 209 674 384" data-label="Image">  <p>Pneumatics</p> </div> <p><b>Design</b></p> <ul style="list-style-type: none"> <li>• Designing a toy that uses a pneumatic system.</li> <li>• Developing design criteria from a design brief.</li> <li>• Generating ideas using thumbnail sketches and exploded diagrams.</li> <li>• Learning that different types of drawings are used in design to explain ideas clearly.</li> </ul> <p><b>Make</b></p> <ul style="list-style-type: none"> <li>• Creating a pneumatic system to create a desired motion.</li> <li>• Building secure housing for a pneumatic system.</li> <li>• Select from and use a wider range of materials and components, for a pneumatic system and selecting materials due to their functional and aesthetic characteristics.</li> <li>• Manipulating materials to create different effects by cutting, creasing and folding.</li> </ul> <p><b>Evaluate</b></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> </ul> <p><b>Technical knowledge</b></p> <ul style="list-style-type: none"> <li>• Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.</li> <li>• Apply understanding of how to fasten materials together.</li> <li>• To understand that pneumatic systems</li> </ul>	<div data-bbox="1122 209 1312 384" data-label="Image">  <p>Digital</p> </div> <p><b>Design</b></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> <li>• Designing a technology pouch</li> </ul> <p><b>Make</b></p> <ul style="list-style-type: none"> <li>• Drawing and manipulating 2D shapes, using computer-aided design.</li> <li>• Selecting and using the appropriate tools and equipment for cutting, joining, shaping and decorating a foam pouch.</li> <li>• Use a template when cutting and assembling the pouch.</li> <li>• Follow a list of design requirements.</li> <li>• Problem solving by suggesting potential features on a Micro:bit and justifying my ideas.</li> </ul> <p><b>Evaluate</b></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> </ul> <p><b>Technical knowledge</b></p> <ul style="list-style-type: none"> <li>• Apply understanding of how to fasten materials together.</li> <li>• Developing design ideas for a technology pouch.</li> <li>• Applying functional features such as using foam to create soft buttons.</li> </ul>	<div data-bbox="1749 209 1939 384" data-label="Image">  <p>Food</p> </div> <p><b>Design</b></p> <ul style="list-style-type: none"> <li>• Creating a healthy and nutritious recipe for a pizza using seasonal ingredients, considering the taste, texture, smell and appearance of the dish.</li> <li>• Describe the benefits of seasonal fruits and vegetables and the impact on the environment.</li> </ul> <p><b>Make</b></p> <ul style="list-style-type: none"> <li>• Knowing how to prepare themselves and a workspace to cook safely in, learning the basic rules to avoid food contamination.</li> <li>• Following the instructions within a recipe.</li> </ul> <p><b>Evaluate</b></p> <ul style="list-style-type: none"> <li>• Establishing and using design criteria to help test and review dishes.</li> <li>• Suggesting points for improvement when making a pizza.</li> </ul> <p><b>Technical knowledge</b></p> <ul style="list-style-type: none"> <li>• To know that not all fruits and vegetables can be grown in the UK.</li> <li>• To know that climate affects food growth.</li> <li>• To know that vegetables and fruit grow in certain seasons.</li> <li>• To know that cooking instructions are known as a 'recipe'.</li> <li>• To know that imported food is food that has been brought into the country.</li> </ul>




	<p>can be used as part of a mechanism.</p> <ul style="list-style-type: none"> <li>To know that pneumatic systems operate by drawing in, releasing and compressing air.</li> </ul>	<ul style="list-style-type: none"> <li>Analysing and evaluating an existing product.</li> <li>Identifying the key features of a pouch.</li> <li>Apply their understanding of computing to program, monitor and control their products.</li> </ul>	
Year 4	<p><b>Structures – Pavilions</b></p>  <p>Structures</p> <p><b>Design</b></p> <ul style="list-style-type: none"> <li>Designing a stable pavilion structure that is aesthetically pleasing.</li> <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><b>Make</b></p> <ul style="list-style-type: none"> <li>Building frame structures designed to support weight.</li> <li>Making a variety of free-standing frame structures of different shapes and sizes.</li> <li>Selecting appropriate materials to build a strong structure and for the cladding.</li> <li>Reinforcing corners to strengthen a structure.</li> <li>Learning to create different textural effects with materials.</li> </ul> <p><b>Evaluate</b></p> <ul style="list-style-type: none"> <li>Investigate and analyse a range of existing</li> </ul>	<p><b>Electrical circuits – Torches</b></p>  <p>Electrical Systems</p> <p><b>Design</b></p> <ul style="list-style-type: none"> <li>Designing a torch, giving consideration to the target audience and creating both design and success criteria focusing on features of individual design ideas.</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><b>Make</b></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> <li>Making a torch with a working electrical circuit and switch.</li> <li>Using appropriate equipment to cut and attach materials.</li> <li>Assembling a torch according to the design and success criteria.</li> </ul> <p><b>Evaluate</b></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</li> </ul>	<p><b>Textiles - Pencils cases</b></p>  <p>Textiles</p> <p><b>Design</b></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><b>Make</b></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>Measuring, marking and cutting fabric using a paper template.</li> <li>Selecting a stitch style to join fabric.</li> <li>Sewing neatly using small regular stitches.</li> <li>Incorporating a fastening to a design.</li> </ul> <p><b>Evaluate</b></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</li> </ul>

	<p>products.</p> <ul style="list-style-type: none"> <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><b>Technical knowledge</b></p> <ul style="list-style-type: none"> <li>• Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.</li> <li>• Understand that a 'free-standing' structure is one that can stand on its own.</li> <li>• A pavilion is a decorative building or structure for leisure activities.</li> <li>• Cladding can be applied to structures for different effects.</li> <li>• To know that aesthetics are how a product looks.</li> <li>•</li> </ul>	<p>design criteria and consider the views of others to improve their work.</p> <ul style="list-style-type: none"> <li>• Understand how key events and individuals in design and technology have helped shape the world.</li> </ul> <p><b>Technical knowledge</b></p> <ul style="list-style-type: none"> <li>• Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.</li> <li>• That electrical conductors are materials which electricity can pass through.</li> <li>• That electrical insulators are materials which electricity cannot pass through.</li> <li>• A battery contains stored electricity that can be used to power products.</li> <li>• An electrical circuit must be complete for electricity to flow.</li> <li>• A switch can be used to complete and break an electrical circuit.</li> </ul>	<p>views of others to improve their work.</p> <ul style="list-style-type: none"> <li>• Making and testing a paper template with accuracy and in keeping with the design criteria.</li> </ul> <p><b>Technical knowledge</b></p> <ul style="list-style-type: none"> <li>• Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.</li> <li>• Understand how to attach materials, i.e zips, sewing and glue.</li> <li>• A fastening is something that holds two pieces of material together.</li> <li>• Different fastening types are useful for different purpose.</li> <li>• Creating a mock-up (prototype) of their design is useful for checking ideas and proportions.</li> </ul>
<b>Year 5</b>	<b>Structures – Bridges</b>	<b>Mechanisms (cams) - Design a moving toy.</b>	<b>Food Technology - Potato Salad</b>



	<p><b>Design</b></p> <ul style="list-style-type: none"> <li>• Designing a stable structure that is able to support weight.</li> <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>• Explaining why selecting appropriate materials is an important part of the design process, for a bridge.</li> <li>• Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes and pattern pieces.</li> </ul> <p><b>Make</b></p> <ul style="list-style-type: none"> <li>• Using triangles to create bridges that span a given distance and support a load.</li> <li>• Adapting and improving own bridge structure by identifying points of weakness and reinforcing them as necessary, Using card corners for support.</li> <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><b>Evaluate</b></p> <ul style="list-style-type: none"> <li>• Investigate and analyse a range of existing products.</li> </ul>	<p><b>Design</b></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>• Designing a toy that uses a cam mechanism system.</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><b>Make</b></p> <ul style="list-style-type: none"> <li>• Creating a cams system to create a desired motion.</li> <li>• Building secure housing for a cams system.</li> <li>• Select from and use a wider range of materials and components, for a pneumatic system and selecting materials due to their functional and aesthetic characteristics.</li> <li>• Manipulating materials to create different effects by cutting, creasing and folding</li> <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 and textiles, according to their functional properties and aesthetic qualities.</li> </ul> <p><b>Evaluate</b></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> </ul> <p><b>Technical knowledge</b></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> </ul>	<p><b>Design</b></p> <ul style="list-style-type: none"> <li>• Creating a healthy and nutritious recipe for a potato salad using seasonal ingredients, considering the taste, texture, smell and appearance of the dish.</li> <li>• Create a recipe understanding complimentary flavours.</li> <li>• Describe the benefits of seasonal fruits and vegetables and the impact on the environment.</li> <li>• Design a label for a product, to attract a customer.</li> </ul> <p><b>Make</b></p> <ul style="list-style-type: none"> <li>• Knowing how to prepare themselves and a workspace to cook safely in, learning the basic rules to avoid food contamination.</li> <li>• Cut ingredients to the appropriate proportion sizes.</li> <li>• Cook and prepare ingredients as per instructions.</li> </ul> <p><b>Evaluate</b></p> <ul style="list-style-type: none"> <li>• Establishing and using design criteria to help test and review dishes.</li> <li>• Suggesting points for improvement when making a potato salad.</li> <li>• Discuss whether the label adds to the appeal of the product.</li> </ul> <p><b>Technical knowledge</b></p> <ul style="list-style-type: none"> <li>• To know that climate affects food growth.</li> <li>• To know that vegetables and fruit grow in certain seasons.</li> <li>• To know that cooking instructions are known as a 'recipe'.</li> <li>• Understand what flavours complement each other.</li> <li>• Use CAD to design a label.</li> </ul>
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	<ul style="list-style-type: none"> <li>Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.</li> <li>Suggesting points for improvements for own bridges and those designed by others.</li> <li>Understand how key events and individuals in design and technology have helped shape the world.</li> </ul> <p><b>Technical knowledge</b></p> <ul style="list-style-type: none"> <li>Apply understanding that there are some different ways to reinforce structures.</li> <li>Triangles can be used to reinforce bridges.</li> <li>To know that properties are words that describe the form and function of materials.</li> <li>Material selection is important based on their properties.</li> </ul>	<ul style="list-style-type: none"> <li>Cams mechanisms can create different movements depending on the shape of the cam.</li> <li>Understand how aesthetics can appeal to a chosen audience.</li> </ul>	
<b>Year 6</b>	<p><b>Food Technology – Biscuits</b></p> <div data-bbox="488 906 685 1088" style="border: 2px solid red; padding: 5px; text-align: center;">         Food     </div> <p><b>Design</b></p> <ul style="list-style-type: none"> <li>Creating a healthy and nutritious recipe for biscuits using ingredients, considering the taste, texture, smell and appearance of the dish.</li> <li>Create a recipe understanding complimentary flavours.</li> </ul> <p><b>Make</b></p> <ul style="list-style-type: none"> <li>Choose appropriate tools for different needs of ingredient preparation. For example what size holes in a sieve?</li> <li>Cook and prepare ingredients as per instructions.</li> </ul>	<p><b>Textiles – Waistcoats</b></p> <div data-bbox="1115 906 1312 1088" style="border: 2px solid red; padding: 5px; text-align: center;">         Textiles     </div> <p><b>Design</b></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> <li>Designing a waistcoat in accordance with a specification and design criteria to fit a specific theme.</li> <li>Annotating designs.</li> </ul> <p><b>Make</b></p>	<p><b>Digital - World Navigation</b></p> <div data-bbox="1742 906 1939 1088" style="border: 2px solid red; padding: 5px; text-align: center;">         Electrical Systems     </div> <p><b>Design</b></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 and computer-aided design.</li> <li>Writing a design brief from information submitted by a client.</li> <li>Developing a product idea through annotated sketches.</li> <li>Developing an awareness of sustainable</li> </ul>



	<p><b>Evaluate</b></p> <ul style="list-style-type: none"> <li>Establishing and using design criteria to help test and review dishes.</li> <li>Suggesting points for improvement when making a biscuits.</li> <li>Following a step-by-step method carefully to make a recipe.</li> </ul> <p><b>Technical knowledge</b></p> <ul style="list-style-type: none"> <li>Adapting a traditional recipe, understanding that the nutritional value of a recipe alters if you remove, substitute or add additional ingredients.</li> <li>Writing an amended method for a recipe to incorporate the relevant changes to ingredients.</li> <li>Using equipment safely, including knives, hot pans and hobs.</li> <li>Identifying the nutritional differences between different products and recipes. Use a nutritional calculator.</li> </ul>	<ul style="list-style-type: none"> <li>Using a template when pinning panels onto fabric.</li> <li>Marking and cutting fabric accurately, in accordance with a design.</li> <li>Sewing a strong running stitch, making small, neat stitches and following the edge.</li> <li>Tying strong knots.</li> <li>Decorating a waistcoat – attaching objects using thread and adding a secure fastening.</li> <li>Learning different decorative stitches.</li> <li>Sewing accurately with even regularity of stitches.</li> <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><b>Evaluate</b></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> <li>Evaluating work continually as it is created.</li> </ul> <p><b>Technical knowledge</b></p> <ul style="list-style-type: none"> <li>Design clothing with the client/target customer in mind.</li> <li>Using a template (or clothing pattern) helps to accurately mark out a design on fabric.</li> <li>It is important to use consistently sized stitches.</li> <li>Use a CAD to aid the design.</li> </ul>	<p>design.</p> <p><b>Make</b></p> <ul style="list-style-type: none"> <li>Placing and manoeuvring 3D objects, using CAD.</li> <li>Changing the properties of, or combine one or more 3D objects, using CAD.</li> <li>Considering materials and their functional properties, especially those that are sustainable and re-cyclable (for example, cork and bamboo).</li> <li>Explaining material choices and why they were chosen as part of a product concept.</li> <li>Programming an N,E,S,W cardinal compass.</li> </ul> <p><b>Evaluate</b></p> <ul style="list-style-type: none"> <li>Explaining the key functions and features of my navigation tool to the client as part of a product concept pitch.</li> <li>Demonstrating a functional program as part of a product concept.</li> </ul> <p><b>Technical knowledge</b></p> <ul style="list-style-type: none"> <li>Know that accelerometers can detect movement.</li> <li>Sensors can be useful in products as they mean the product can function without human input.</li> <li>Designers write design briefs and develop design criteria to enable them to fulfil a client's request.</li> <li>'Multifunctional' means an object or product has more than one function.</li> <li>Magnetometers are devices that measure the Earth's magnetic field to determine which direction you are facing.</li> </ul>
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