



# Design and Technology at Longparish C.E. Primary School

**Progression of skills  
and  
National Curriculum coverage**

**National Curriculum Guidance:**  
 Design and technology is an inspiring, rigorous and practical subject. Using creativity and imagination, pupils design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. They acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art. Pupils learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world. High-quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation.

<b>Art Knowledge and Skills</b>	<b>Year 1/2</b>	<b>Year 3/4</b>	<b>Year 5/6</b>
<b>Curriculum Objectives</b>	<p><b>Pupils should be taught:</b>            Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home and school, gardens and playgrounds, the local community, industry and the wider environment].</p> <p><b><u>Cooking and nutrition</u></b>            As part of their work with food, pupils should be taught how to cook and apply the principles of nutrition and healthy eating. Instilling a love of cooking in pupils will also open a door to one of the great expressions of human creativity. Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well, now and in later life.</p>	<p><b>Pupils should be taught:</b>            Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment].</p> <p><b><u>Cooking and nutrition</u></b>            As part of their work with food, pupils should be taught how to cook and apply the principles of nutrition and healthy eating. Instilling a love of cooking in pupils will also open a door to one of the great expressions of human creativity. Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well, now and in later life.</p>	
<b>Vocabulary</b>	design criteria, turbine, axle, joints, stability, levers, sliders, component, running stitch, joining, balanced diet, food group, strength, stiffness	aesthetic, facade, freestanding, reinforce, compression, tension, strut, tie, span, beam, pneumatic, functional, motion, target audience, cross stitch, applique, fastening, nutrition, seasonal, contamination.	arch, truss, suspension, storyboard, cams, linkages, input, output, prototype, reliability, proportion, blanket stitch, nutritional value, packaging, cross-contamination
<b>STRUCTURES</b>			

<p style="text-align: center;"><b>Designing</b></p> <p>Understand contexts, users and purposes for a product through generating, developing and communicating ideas.</p>	<ul style="list-style-type: none"> <li>● <b>To explore design criterias and recognise their importance</b></li> <li>● <b>To design a structure based on a design criteria</b></li> <li>● <b>To explore different types of structures</b></li> </ul> <p>To explore clear design criterias and begin to understand the importance. Begin to include individual requirements in a design. Generating and communicating ideas using sketching and modelling. Learning about different types of structures, found in the natural world and in everyday objects</p>	<ul style="list-style-type: none"> <li>● <b>To clearly design an appealing, stable structure for a purpose</b></li> </ul> <p>Create designs with key features to appeal to a specific person/purpose. Clearly drawing and labelling designs, including features, 3D shapes needed, materials and colours. Designing structures that are stable, aesthetically pleasing and selecting materials to create a desired effect.</p>	<ul style="list-style-type: none"> <li>● <b>To clearly and concisely design a stable structure which is able to support weight</b></li> <li>● <b>To clearly and concisely design multiple structures for a purpose</b></li> </ul> <p>Design stable structures that are able to support weight. Designing an area featuring a variety of different structures, giving careful consideration to how the structures will be used, considering effective and ineffective designs <i>(for example, a playground)</i>.</p>
<p style="text-align: center;"><b>Making</b></p> <p>Using practical skills, techniques and a range of materials to accurately join and finish a product, using a variety of functional and aesthetic qualities.</p>	<ul style="list-style-type: none"> <li>● <b>To make a (insert structure here).</b></li> </ul> <p>To make stable structures using resources such as card, tape and glue. Follow instructions to assemble a structure. Make a structure using functional turbines/axles which are assembled into a main supporting structure. Using a design criteria. Create joints and structures from paper/card and tape.</p>	<ul style="list-style-type: none"> <li>● <b>To make a (insert structure here).</b></li> </ul> <p>Create structures with special features for individual designs. Make facades from a range of materials. Create a range of different shaped frame structures. Experiment with different shapes and sizes of freestanding structures. Select appropriate materials to build a strong structure. Explore reinforcing corners to strengthen a structure. Learning to create different textural effects with materials</p>	<ul style="list-style-type: none"> <li>● <b>To make a (insert structure here).</b></li> </ul> <p>To create structures that support weight using support systems (beams, triangles). Use measurement and marking independently within their build. Selecting appropriate tools and equipment for particular tasks Using the correct techniques to saws safely. Identifying where a structure needs reinforcement and using card corners for support Building a range of structures, drawing upon new and prior knowledge of structures</p>

			Measuring, marking and cutting wood to create a range of structures. Using a range of materials to reinforce and add decoration to structures.
<p><b>Evaluating</b></p> <p>To analyse and investigate their own products as well as existing products based on a clear design criteria</p>	<ul style="list-style-type: none"> <li>● <b>To evaluate and test my (insert structure here)</b></li> </ul> <p>To evaluate their structure using their design criteria and testing whether the structure is stable and strong, making alterations if it isn't. Suggest points for improvement. Identify the weakest part.</p>	<ul style="list-style-type: none"> <li>● <b>To critically evaluate and test my (insert structure here)</b></li> </ul> <p>To evaluate my own work and that of the class based on the aesthetic of the finished product. To suggest ideas for modification. Describe what characteristics of the construction and design made it most effective, considering effective and ineffective designs.</p>	<ul style="list-style-type: none"> <li>● <b>To critically evaluate and improve my (insert structure here)</b></li> </ul> <p>Adapt and improve structure by identifying points of weakness and reinforcing them. Suggest and discuss improvements for my own structures and that of others. Improve a design based on peer assessment. Test and adapt a design to improve it as it is developed, identifying what makes it successful.</p>
<p><b>Technical Knowledge</b></p> <p>To understand and explore how to make products work, and improve and strengthen products using mechanisms and mechanical systems.</p>	<ul style="list-style-type: none"> <li>● <b>To explore structures and their features</b></li> </ul> <p>Developing an awareness of different structures for different purposes. Exploring 2D and 3D nets and how they turn into structures. Understanding that cylinders are a strong structure type and that the shape of materials can improve the stiffness of a structure. Understanding that axles are used in structures and mechanisms to make parts turn in a circular motion. Identifying man-made and natural structures.</p>	<ul style="list-style-type: none"> <li>● <b>To investigate structures and their features</b></li> </ul> <p>Identify features of a structure. Identify suitable materials, considering weight, compression and tension. Extending the knowledge of wide and flat based objects are more stable. Understanding the vocabulary of strut, tie, span and beam. Understanding the difference between frame and shell structure. Building on prior knowledge net structures and broadening knowledge of frame structures. Understanding that architects consider</p>	<ul style="list-style-type: none"> <li>● <b>To investigate structures and their stability</b></li> </ul> <p>To explore how to create a strong beam. Identify arch and beam bridges and understand the terms: compression and tension. Identify stronger and weaker structures. Investigating different ways to reinforce structures. Articulating the difference between beam, arch, truss and suspension bridges. Identifying shell structures in everyday</p>

	<p>Exploring structure stability and knowing that structures with wide, flat bases or legs are the most stable. Also understanding the shape of a structure can affect its strength.</p> <p>Using the vocabulary: strength, stiffness and stability when discussing structures.</p>	<p>light, shadow and patterns when designing.</p>	<p>life (cars, aeroplanes, tins, cans). Understanding natural and manmade structures.</p>
<b>Mechanisms</b>			
<p style="text-align: center;"><b>Designing</b></p> <p>Understand contexts, users and purposes for a product through generating, developing and communicating ideas.</p>	<ul style="list-style-type: none"> <li>● <b>To explore a variety of mechanisms</b></li> <li>● <b>To design a product with a moving mechanism</b></li> </ul> <p>Begin to explore a variety of mechanisms and how they work. Explain how to adapt mechanisms, using bridges or guides to control the movement</p> <p>Create class design criterias. Design a moving mechanism for a specific audience, in accordance to the design criteria <i>(for example, a moving story book or monster)</i>.</p> <p>Design a moving vehicle that includes wheels, axles and axle holders, which will allow the wheels to move. Begin to design wheels and other features.</p> <p>Creating clearly labelled drawings which illustrate movement. Selecting a suitable linkage system to produce the desired motions.</p>	<ul style="list-style-type: none"> <li>● <b>To clearly design a product with a moving mechanism</b></li> <li>● <b>To design a product using a launch mechanism</b></li> <li>● <b>To personalise a product</b></li> </ul> <p>Continue to explore a variety of mechanisms and how they work. Developing design criteria from a design brief.</p> <p>Generating ideas using thumbnail sketches and exploded diagrams. Learning that different types of drawings are used in design to explain ideas clearly.</p> <p>Design a product which uses a pneumatic system <i>(for example a toy)</i>. Designing a launch mechanism that reduces air resistance <i>(for example, slingshot car)</i>.</p> <p>Drawing a net to create a structure from. Choosing shapes that increase or decrease speed as a result of air resistance.</p>	<ul style="list-style-type: none"> <li>● <b>To clearly and concisely design a product that includes more than one mechanism</b></li> <li>● <b>To experiment with a range of cams</b></li> <li>● <b>To clearly and concisely design a product using cams</b></li> </ul> <p>Design products which include a variety of structures and mechanisms <i>(for example a pop-up book)</i>. Name each mechanism, input and output correctly within designs. Use of storyboards for ideas if appropriate.</p> <p>Experiment with a range of cams. Create designs for an automata product <i>(for example, a toy)</i> based on a choice of cam to create a desired movement. Understanding how linkages change the direction of a force.</p>

	Selecting appropriate materials based on their properties.	Personalising a design.	Producing designs which include products that make things move at the same time.
<p><b>Making</b></p> <p>Using practical skills, techniques and a range of materials to accurately join and finish a product, using a variety of functional and aesthetic qualities.</p>	<ul style="list-style-type: none"> <li>• <b>To make a (insert here) using a mechanism</b></li> </ul> <p>To follow a design to create a moving model using levers or sliders. Adapting mechanisms if necessary. Make linkages using card for levers or split pins for pivots. Experimenting with linkages, adjusting widths, lengths and thickness of card used. Cutting and assembling components neatly. Following a design brief.</p>	<ul style="list-style-type: none"> <li>• <b>To make a (insert here) using a pneumatic system</b></li> <li>• <b>To make a (insert here) using a launch mechanism</b></li> </ul> <p>To produce a <a href="#">pneumatic system</a> to create a desired motion. Build secure housing for a pneumatic system. Use syringes and balloons to create different types of pneumatic systems, ensuring it is functional and appealing. Make a launch mechanism that reduces air resistance (<i>for example, slingshot car</i>). Selecting materials, thinking about their functional and aesthetic characteristics. Manipulating materials to create effects by cutting, creasing, folding and weaving. Measuring, marking, cutting and assembling with increasing accuracy. Making a model based on a chosen design.</p>	<ul style="list-style-type: none"> <li>• <b>To make a (insert here) using a variety of mechanisms</b></li> <li>• <b>To make a (insert here) using cams</b></li> </ul> <p>To follow a design brief, focussing on accuracy. Making mechanisms and/or structures using sliders, pivots and folds to produce movement. Understand how to use layers and spacers to hide workings of mechanisms. Make an automata product (<i>for example, a toy</i>) based on a choice of cam to create a desired movement. Measuring, marking and cutting components accurately using a ruler and scissors. Assembling components accurately to make a stable frame. Selecting appropriate materials based on the materials being joined and the speed at which the glue needs to dry/set.</p>
<p><b>Evaluating</b></p> <p>To analyse and investigate their own products as well as existing products based on a clear design criteria</p>	<ul style="list-style-type: none"> <li>• <b>To evaluate and test my (insert product here)</b></li> </ul> <p>Test the finished product to see if it works as planned and if not, explain how it can be fixed. Adapt if necessary. Reviewing the success of the product by testing it with it's intended audience.</p>	<ul style="list-style-type: none"> <li>• <b>To critically evaluate and test my (insert product here)</b></li> </ul> <p>To use the views of my peers to improve designs. Test the mechanisms and modify the outcome.</p>	<ul style="list-style-type: none"> <li>• <b>To critically evaluate and improve my (insert product here)</b></li> </ul> <p>To evaluate my work and that of others. Receive feedback on my own work from my peers. Suggest points for improvement and act on these.</p>

	<p>Test the mechanisms, identifying what stops wheels from turning. Evaluating my own design against the design criteria. Begin to use peer assessment to modify a final design.</p>	<p>Suggest improvements to my own design and that of others. Evaluate different factors, like speed, of the final product based on the accuracy of the workmanship.</p>	<p>Describing changes they would make/ do if they were to do the project again.</p>
<p><b>Technical Knowledge</b> To understand and explore how to make products work, and improve and strengthen products using mechanisms and mechanical systems.</p>	<ul style="list-style-type: none"> <li>• <b>To explore (insert mechanism here) mechanisms</b> Learn what levers and sliders are and how mechanisms that make things move in different ways. Using the terminology: up, down, left, right, vertical and horizontal to describe movement. Identifying what mechanism makes a toy/vehicle roll forwards. Understanding that wheels need axels in order to move. Learning that mechanisms are a collection of moving parts that work together in a machine. Understanding that there is an input and output in a mechanism. Identifying mechanisms in everyday objects.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>To investigate (insert mechanism here) mechanisms</b> To understand how pneumatic systems work and how they can be used as part of a mechanism. Learning that mechanisms are a system of parts that work together to create motion Learning that pneumatic systems force air over a distance to create movement Understanding that products change and evolve over time. Learning that all moving things have kinetic energy and that kinetic energy is the energy that something (object person) has by being in motion.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>To investigate and describe (insert mechanism here) mechanisms</b> Understanding that an input is the motion used to start a mechanism and the output is the motion that happens as a result of starting the input. Knowing that mechanisms control movement. Describing mechanisms that can be used to change one kind of motion into another. Using a bench hook to saw safely and effectively. Exploring cams, learning that different shaped cams produce different follower movements. Exploring types of motions and direction of a motion.</li> </ul>
<b>Electrical Systems</b>			

	N?A	<ul style="list-style-type: none"> <li>• <b>To clearly design a product that uses static electricity</b></li> <li>• <b>To clearly design a product with a light source</b></li> </ul> <p>Design a product that works using static (<i>for example, a game</i>).</p> <p>Identify a design criteria and a target audience.</p> <p>Design a product that uses light (<i>for example, a torch</i>), giving consideration to the target audience and creating both design and success criteria focusing on features of individual design ideas.</p>	<ul style="list-style-type: none"> <li>• <b>To clearly and concisely design a product with an electrical control circuit</b></li> <li>• <b>To clearly and concisely design a product using electromagnetic motors</b></li> <li>• <b>To use prototypes within the design process</b></li> </ul> <p>Design a product that uses a simple electrical control circuit (<i>for example, an electronic greetings card</i>).</p> <p>Create labelled designs showing positive and negative parts in relation to the LED and the battery</p> <p>Design a steady hand game, identifying and naming the components required</p> <p>Draw designs from three different perspectives</p> <p>Generate ideas through sketching and discussion and model ideas through rough prototypes.</p>
<p><b>Making</b></p> <p>Using practical skills, techniques and a range of materials to accurately join and finish a product, using a variety of functional and aesthetic qualities.</p>		<ul style="list-style-type: none"> <li>• <b>To make a (insert product here) using static electricity</b></li> <li>• <b>To make a (insert product here) with a working light source</b></li> </ul> <p>To make a product that works using static, referring to the design criteria.</p> <p>Use a wide range of materials and equipment safely.</p> <p>Using electrostatic energy to move objects in isolation as well as in part of a system.</p>	<ul style="list-style-type: none"> <li>• <b>To make a (insert product here) using a electrical control circuit</b></li> <li>• <b>To make a product using electromagnetic motors</b></li> </ul> <p>To make working circuits with knowledge and skill.</p> <p>Create a product that uses a simple electrical control circuit (<i>like an electronic greetings card</i>).</p> <p>Creating a product using a design criteria.</p>



		<p>Make a product with a working light source using an electrical circuit and switch.</p> <p>Using appropriate equipment to cut and attach materials.</p> <p>Assembling products according to the design criteria.</p>	<p>Mapping out where different components of the circuit will go.</p> <p>Making electromagnetic motors and tweaking the motor to improve its function.</p> <p>Accurately cutting, folding and assembling a net for a product.</p> <p>Decorating and finishing a product to a high standard</p> <p>Making and testing a circuit and incorporating a circuit into a base .</p>
<p><b>Evaluating</b></p> <p>To analyse and investigate their own products as well as existing products based on a clear design criteria</p>		<ul style="list-style-type: none"> <li>● <b>To critically evaluate and test my (insert product here)</b></li> </ul> <p>Give constructive feedback to my own work and the work of my peers.</p> <p>Test the success of the product, based on the electrical system and how it performs.</p> <p>Evaluating my own electrical products and that of others</p> <p>Testing and evaluating the success of a final product and taking inspiration from the work of peers.</p>	<ul style="list-style-type: none"> <li>● <b>To critically evaluate and improve my (insert product here)</b></li> </ul> <p>To critically evaluate a completed product against the original design.</p> <p>Look at modifications that could be made to improve the overall reliability or aesthetics.</p> <p>Testing own and others finished products, identifying what went well and making feasible suggestions for improvement.</p>
<p><b>Technical Knowledge</b></p> <p>To understand and explore how to make products work, and improve and strengthen products using mechanisms and mechanical systems.</p>		<ul style="list-style-type: none"> <li>● <b>To understand static electricity</b></li> <li>● <b>To learn about electrical items and how they work</b></li> </ul> <p>Understanding what static electricity is and how it moves objects through attraction and repulsion.</p> <p>Exploring and generating static electricity independently and using it to move objects.</p> <p>Learning how electrical items work and identifying electrical products.</p>	<ul style="list-style-type: none"> <li>● <b>To explore and experiment with functional circuits safely</b></li> </ul> <p>To learn about the key components used to create a functioning circuit.</p> <p>Learning that graphite is a conductor and can be used as part of a circuit.</p> <p>Learning the difference between series and parallel circuits.</p> <p>Understanding that breaks in a circuit will stop it from working.</p> <p>Understanding how electromagnetic</p>

		<p>Learning what electrical conductors and insulators are.</p> <p>Understanding that a battery contains stored electricity and can be used to power products</p> <p>Identifying the features of a product with a light source and understanding how it works.</p>	<p>motors work.</p> <p>Learning that batteries contain acid, which can be dangerous if they leak.</p> <p>Learning that when electricity enters a magnetic field it can make a motor.</p>
<p><b>Designing</b></p> <p>Understand contexts, users and purposes for a product through generating, developing and communicating ideas.</p>	<ul style="list-style-type: none"> <li>• <b>To explore different ways of joining fabrics.</b></li> <li>• <b>To design a (<i>insert textile product here</i>)</b></li> </ul> <p>Explore different ways of joining fabrics (glue, pinning, stapling) explore different examples of textiles, including a running stitch.</p> <p>Design simple products using fabric, for example a puppet or a pouch.</p>	<ul style="list-style-type: none"> <li>• <b>To explore different stitching techniques</b></li> <li>• <b>To clearly design a (<i>insert textile product here</i>) based on a design criteria</b></li> </ul> <p>Explore different stitching techniques (running stitch, cross-stitch, applique). Design and make a template from an existing product (for example, a cushion), applying individual design criteria.</p> <p>Write a design criteria for a product, articulating decisions made.</p> <p>Design personalised products using fastenings (<i>for example, a book sleeve</i>).</p>	<ul style="list-style-type: none"> <li>• <b>To clearly and concisely design a (<i>insert textile product here</i>) based on a detailed design criteria</b></li> </ul> <p>Design a stuffed toy, considering the main component shapes required and create an appropriate template.</p> <p>Consider proportions of individual proportions within the design.</p> <p>Design an article of clothing (for example, a waistcoat) in accordance to specification linked to a set of design criteria to fit a specific theme.</p> <p>Write detailed annotations.</p>
<p><b>Making</b></p> <p>Using practical skills, techniques and a range of materials to accurately join and finish a product, using a variety of functional and aesthetic qualities.</p>	<ul style="list-style-type: none"> <li>• <b>To join fabrics using (<i>insert joining method here</i>)</b></li> </ul> <p>Begin to cut material neatly with scissors.</p> <p>Using joining methods to attach fabrics and decorations, such as fabric glue or a running stitch.</p>	<ul style="list-style-type: none"> <li>• <b>To make and decorate a (<i>insert textile here</i>)</b></li> </ul> <p>Follow a design criteria to create a product.</p> <p>Select and cut fabrics with ease.</p> <p>Use a cross stitch to join fabric together.</p> <p>Decorate fabric using appliqué.</p>	<ul style="list-style-type: none"> <li>• <b>To skillfully make and finish a (<i>insert textile here</i>)</b></li> </ul> <p>Create a 3D textile using stuffing and a 2D design.</p> <p>Measure, mark and cut fabric accurately and independently</p> <p>Creating strong and secure blanket stitches when joining fabric.</p>

		<p>Make and test a paper template with accuracy.</p> <p>Measuring, marking and cutting fabric using a paper template.</p> <p>Select a stitch style to join fabric, working neatly sewing small neat stitches.</p> <p>Incorporate a fastening into a design.</p>	<p>Use applique to attach pieces of fabric decoration.</p> <p>Use template pinning panels onto fabric</p> <p>Sewing a strong running stitch, making small, neat stitches and following the edge.</p> <p>Decorating a textile (<i>like a waistcoat</i>) - attaching objects using thread and adding a secure fastening</p>
<p><b>Evaluating</b></p> <p>To analyse and investigate their own products as well as existing products based on a clear design criteria</p>	<ul style="list-style-type: none"> <li>• <b>To evaluate my (<i>insert textile here</i>)</b></li> </ul> <p>Reflect on the finished product, explaining likes and dislikes.</p> <p>Troubleshooting scenarios posed by the teacher.</p> <p>Discussing as a class, the success of their stitching against the success criteria.</p> <p>Identifying aspects of their peers' work that they particularly like and why.</p>	<ul style="list-style-type: none"> <li>• <b>To critically evaluate my (<i>insert textile here</i>)</b></li> </ul> <p>To evaluate the finished product and think of other ways in which to create similar items.</p> <p>Testing and evaluating an end product against the original design criteria.</p> <p>Deciding how many of the criteria should be met for the product to be considered successful.</p> <p>Suggesting modifications for improvement.</p>	<ul style="list-style-type: none"> <li>• <b>To critically evaluate and test my (<i>insert textile here</i>)</b></li> </ul> <p>To test and evaluate the finished product and give points for further development.</p> <p>Evaluating work continually as it is created.</p>
<p><b>Technical Knowledge</b></p> <p>To understand and explore how to make products work, and improve and strengthen products using mechanisms and mechanical systems.</p>	<ul style="list-style-type: none"> <li>• <b>To join fabrics together using different methods</b></li> </ul> <p>To learn about different ways to join fabrics: pinning, stapling, gluing.</p> <p>Join items using fabric glue or stitching and identify the benefits of each technique.</p> <p>Learn how to thread a needle and tie a knot.</p> <p>Sewing a running stitch which is evenly spaced, neat and even to join fabrics.</p>	<ul style="list-style-type: none"> <li>• <b>To sew cross stitch and applique</b></li> <li>• <b>To identify and evaluate different types of fastenings.</b></li> </ul> <p>To thread needles with greater independence</p> <p>Tie knots with greater independence.</p> <p>Sewing cross stitch and appliqué.</p> <p>Understanding the need to count the thread on a piece of even weave fabric in each direction to create uniform size and appearance.</p> <p>Understanding that fabrics can be layered for effect.</p>	<ul style="list-style-type: none"> <li>• <b>To accurately sew a blanket stitch</b></li> <li>• <b>To explore decorative stitches</b></li> </ul> <p>To learn the blanket stitch technique to join fabrics.</p> <p>Applying blanket stitch so the space between the stitches are even.</p> <p>Threading needles independently and with skill.</p> <p>Learning different decorative stitches.</p> <p>Sewing accurately with even regularity of stitches.</p>

		Understanding that there are different types of fastenings and what they are. Articulating the benefits and disadvantages of different fastening types.	
<b>Cooking and Nutrition</b> Understand how to cook and apply the principles of nutrition and healthy eating.			
<b>Designing</b> Understand contexts, users and purposes for a product through generating, developing and communicating ideas.	<ul style="list-style-type: none"> <li>• <b>To plan a healthy dish</b></li> </ul> To design a healthy dish based on a food combination that works well together.	<ul style="list-style-type: none"> <li>• <b>To design a healthy recipe</b></li> <li>• <b>To design a biscuit</b></li> </ul> To create a healthy and nutritious savoury recipe using seasonal ingredients. Consider the taste, smell, texture and appearance of the dish. Design a biscuit within a given budget, drawing upon taste testing.	<ul style="list-style-type: none"> <li>• <b>To design and adapt a traditional recipe</b></li> <li>• <b>To research and design a 3 course meal</b></li> </ul> Adapt a traditional recipe and understand the nutritional value as you make changes. Write an amended method for a recipe to include changes made. Designing appealing packaging to reflect a recipe. Write a recipe, explaining the key steps, method and ingredients, including facts and drawings from research undertaken.
<b>Making</b> Using practical skills, techniques and a range of materials to accurately join and finish a product, using a variety of functional and aesthetic qualities.	<ul style="list-style-type: none"> <li>• <b>To safely prepare a healthy dish</b></li> <li>• <b>To understand the origins of ingredients</b></li> </ul> Learn how to chop fruits or vegetables safely to make a healthy dish. Begin to use the bridge or claw grip. Identify whether a food is a fruit or vegetable. Understanding where and how fruits and vegetables grow.	<ul style="list-style-type: none"> <li>• <b>To safely prepare a meal using a recipe</b></li> <li>• <b>To write up a recipe</b></li> <li>• <b>To make a biscuit that meets a design brief</b></li> </ul> To understand how to work safely when preparing food to avoid food contamination. Follow the instructions within a recipe accurately.	<ul style="list-style-type: none"> <li>• <b>To safely prepare a meal using a recipe</b></li> <li>• <b>To write up a clear recipe</b></li> </ul> To safely cut and prepare vegetables. Use equipment safely, including knives, hot pans and the hob. Understanding how to avoid cross contamination. Accurately follow a step by step method to make a recipe, including the correct amounts of each ingredient.

	Constructing a dish that meets a design brief.	Cook safely, following basic hygiene rules. Adapting a basic recipe.	Adapt a recipe based on research. Working safely and hygienically with independence.
<p><b>Evaluating</b></p> <p>To analyse and investigate their own products as well as existing products based on a clear design criteria</p>	<ul style="list-style-type: none"> <li>• <b>To taste and compare fruits and vegetables</b></li> <li>• <b>To evaluate my dish based on a design criteria</b></li> </ul> <p>Taste test and evaluate different food combinations, describing appearance, smell, texture and taste. Taste test the final dish. Evaluate cutting grips and which one is the most effective.</p>	<ul style="list-style-type: none"> <li>• <b>To evaluate my dish and suggest improvements</b></li> </ul> <p>To use the design criteria to test and review dishes. Evaluate and compare a range of products. Describe the benefits of seasonal ingredients and the impact on the environment. Taste test the final dish and suggest improvements. Evaluate the recipe used, considering taste, smell, texture and appearance.</p>	<ul style="list-style-type: none"> <li>• <b>To identify the nutritional value of different foods and recipes</b></li> <li>• <b>To critically evaluate my finished meal and suggest improvements</b></li> </ul> <p>Identify the nutritional differences between different products and recipes. Identify and describe healthy benefits of the different food groups Evaluating a recipe, considering: taste, smell, texture and origin of the food. Taste testing and scoring final products. Suggesting and writing up points of improvements in productions. Evaluating health and safety in production to minimise cross contamination.</p>
<p><b>Technical Knowledge</b></p> <p>To understand and explore how to make products work, and improve and strengthen products using mechanisms and mechanical systems.</p>	<ul style="list-style-type: none"> <li>• <b>To understand what makes a balanced diet</b></li> </ul> <p>To understand the difference between fruits and vegetables. Grouping fruits and vegetables by texture or taste. Learn what makes a balanced diet and what the five food groups are. Learn where to look to find the nutritional information on food packaging.</p>	<ul style="list-style-type: none"> <li>• <b>To understand that climate affects food growth</b></li> <li>• <b>To understand that importing food impacts the environment</b></li> <li>• <b>To understand the nutritional benefits of produce</b></li> </ul> <p>Learning that climate has an impact on food growth. Understanding that imported foods travel from far away and this can impact on the environment.</p>	<ul style="list-style-type: none"> <li>• <b>To understand where food comes from</b></li> <li>• <b>To understand the factors of a healthy, balanced diet</b></li> </ul> <p>To understand where food comes from and how this is processed - 'Farm to Fork'. Have an understanding of the ethical issues around the way in which cattle should be farmed. Understand what constitutes a balanced diet.</p>

		<p>Understanding that vegetables and fruits grow in different seasons. Learning that each fruit and vegetable gives us nutritional benefits. Work safely around food using equipment safely and maintaining excellent hygiene. Learn how to use, store and clean a knife safely.</p>	<p>Comparing two adapted recipes using a nutritional calculator and then identifying the healthier option</p>
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