

Year Group	Structures, Mechanisms, Electrical systems	Textiles	Cooking and Nutrition
Year 1	<p>Designing a moving toy</p> <p><u>Design</u> Is able to evaluate existing structures. Is beginning to use simple design criteria to help develop their ideas. Is able to create clearly labelled drawings which illustrate movement.</p> <p><u>Make</u> Is able to build a stable structure from card, tape and glue. Is able to select from a range of tools and equipment explaining their choices. Is beginning to use a range of materials. Is beginning to assemble and join materials and components.</p> <p><u>Evaluate</u> Is able to make simple judgements about their products and ideas against simple criteria. Is able to discuss and implement how to make it stronger, stiffer and more stable.</p> <p><u>Technical knowledge</u> To know that wheels need to be round to rotate and move. To understand that for a wheel to move it must be attached to a rotating axle. To know that an axle moves within an axle holder which is fixed to the vehicle or toy. To know that the frame of a vehicle (chassis) needs to be balanced.</p>	<p>Creating a place mat using weaving</p> <p><u>Design</u> Is beginning to evaluate the effectiveness of other products. Is able to describe what their product is for and how it works.</p> <p><u>Make</u> Is able to complete a simple weaving action, to complete a weaving template. Is beginning to use and select a range of materials appropriate to their project.</p> <p><u>Evaluate</u> Is able to make simple judgements about their products and ideas against simple criteria. Is able to reflect on a finished product, explaining their likes and dislikes.</p> <p><u>Technical knowledge</u> To know that 'joining technique' means connecting two pieces of material together. To know that there are various temporary methods of joining fabric by using staples, glue or pins To understand that different techniques for joining materials can be used for different purposes To understand that a template (or fabric pattern) is used to cut out the same shape multiple times.</p> <p>To know that drawing a design idea is useful to see how an idea will look.</p>	<p>Making a fruit kebab</p> <p><u>Design</u> Is able to follow procedures for safety and hygiene. Is able to design their own fruit kebab, explaining why they are choosing those particular fruits.</p> <p><u>Make</u> Is able to prepare simple dishes safely and hygienically. Is able to use simple tools to prepare ingredients. Is able to cut, peel and slice carefully using the bridge or claw grip.</p> <p><u>Evaluate</u> Is able to suggest how their product can be improved. Taste and evaluate different food combinations.</p> <p><u>Technical knowledge</u> Demonstrates an awareness that all food comes from plants or animals. Demonstrates an understanding of foods which are healthy and unhealthy. Understanding the difference between fruits and vegetables. To understand that some foods typically known as vegetables are actually fruits (e.g. cucumber). To know that vegetables can grow either above or below ground To know that vegetables can come from different parts of the plant (e.g. roots: potatoes, leaves: lettuce, fruit: cucumber).</p>

<p style="text-align: center;">Year 2</p>	<p>Design a child's story book</p> <p><u>Design</u> Is able to evaluate existing product. Is able to use simple design criteria to help develop their ideas. Is able to say how they will make their products suitable for their intended users.</p> <p><u>Make</u> Is able to model ideas by exploring materials, components, construction kits and by making templates and mockups. Is able to experiment with linkages adjusting the widths, lengths and thicknesses of the card used. Is able to select from a range of materials and components according to their characteristics. Is able to cut, assemble, join and combine materials and components neatly and accurately.</p> <p><u>Evaluate</u> Is able to suggest how their product can be improved. Is able to use peer feedback to change their design.</p> <p><u>Technical knowledge</u> Is able to understand the movement of simple mechanisms such as wheels, sliders and levers. (At least 2 moving parts).</p>	<p>A Tooth Fairy Pouch</p> <p><u>Design</u> Is able to use simple design criteria to help develop their ideas. Is able to say how they will make their products suitable for their intended users. Is able to design their pouch with labels.</p> <p><u>Make</u> Is able to thread a needle. Is able to perform a basic running stitch. Is able to use glue to fasten materials. Is able to use scissors precisely to cut shapes.</p> <p><u>Evaluate</u> Is able to suggest how their product can be improved. Is able to evaluate others stitching in comparison to their own.</p> <p><u>Technical knowledge</u> To know that sewing is a method of joining fabric To know that different stitches can be used when sewing To understand the importance of tying a knot after sewing the final stitch.</p>	<p>Making fruit yogurt</p> <p><u>Design</u> Is able to follow procedures for safety and hygiene. Is able to design their own fruit yogurt, explaining why they are choosing those particular fruits.</p> <p><u>Make</u> Is able to prepare simple dishes safely and hygienically. Is able to use simple tools to prepare ingredients such as knives, grater and a peeler. Is able to cut, peel and slice carefully using the bridge or claw grip. Is able to blend their ingredients together to change the texture.</p> <p><u>Evaluate</u> Is able to suggest how their product can be improved. Is able to describe the taste, texture and smell of their fruit yogurt.</p> <p><u>Technical knowledge</u> Demonstrates an awareness that all food comes from plants or animals. Demonstrates an understanding that everyone should eat at least five portions of fruit and vegetables every day. Is able to name and sort foods into the five groups in The eat well plate.</p>
<p style="text-align: center;">Year 3</p>	<p>Creating an information book</p> <p><u>Design</u> Is able to describe the purpose of their products. Is beginning to develop their own design criteria and use these to inform their ideas. Is able to use an annotated sketch to develop and communicate their ideas.</p>	<p>Creating a Christmas bauble</p> <p><u>Design</u> Is beginning to design products which appeal to a specific audience. Is able to investigate existing products.</p> <p><u>Make</u> Is able to measure, mark out, cut and shape</p>	<p>Making a healthy sandwich</p> <p><u>Design</u> Is able to follow procedures for safety and hygiene. Generate and clarify ideas through discussion with peers and adults to develop design criteria including appearance, taste, texture, aroma for an appealing product for a particular user and purpose.</p>

	<p>Analyses books which use links and linkage mechanism.</p> <p>Make Is able to measure, mark out, cut and shape materials. Is able to assemble, join and combine materials and components. Is beginning to refer to their design criteria as they design and make products.</p> <p>Evaluate Is able to use their design criteria to evaluate their completed products.</p> <p>Technical knowledge Understand and use lever and linkage mechanisms. Distinguish between fixed and loose pivots.</p>	<p>materials. Is able to make a template and use accurately. Is able to cut materials precisely. Is able to use a running, blanket and cross-stitch. Is able to assemble, join and combine materials and components. Is beginning to refer to their design criteria as they design and make products.</p> <p>Evaluate Is able to use their design criteria to evaluate their completed products.</p> <p>Technical knowledge To know that when two edges of fabric have been joined together it is called a seam. To know that it is important to leave space on the fabric for the seam. To understand that some products are turned inside out after sewing so the stitching is hidden.</p>	<p>Make Is able to prepare and make a healthy sandwich safely and hygienically. Select and use appropriate utensils and equipment to prepare and combine ingredients. Is able to spread, cut and grate carefully.</p> <p>Evaluate Is able to use their design criteria to evaluate their ongoing work and completed product. Is able to carry out sensory evaluations of a variety of ingredients and products.</p> <p>Technical knowledge Understands that food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chickens and cattle) and caught (such as fish) in the UK. Demonstrates an understanding that a healthy diet is made up of a variety and balance of different food and drink.</p>
Year 4	<p>Create a structure with a series circuit</p> <p>Design Is able to develop their own design criteria and use these to inform their ideas. Is able to share and clarify their ideas through discussion. Is able to use exploded diagrams to develop and communicate their ideas. Is able to investigate and analyses existing products.</p> <p>Make Is able to measure, mark out, cut and shape components accurately. Is able to refer to their design criteria as they design and make products.</p> <p>Evaluate Is able to use their design criteria to</p>	<p>Design and make a pouch with fastening</p> <p>Design Is able to investigate and analyses existing products. Is able to gather information about the needs and wants of particular individuals and groups to make their product appealing. Is able to model their ideas using pattern piece.</p> <p>Make Is able to use running, cross and blanket stitch. Is able to measure, mark out, cut and shape materials using a paper template. Is able to assemble, join and combine materials and components. Is able to attach a fastening using sewing.</p>	<p>Make a healthy pasta dish</p> <p>Design Is able to investigate and analyses existing products. To understand different cooking methods. Generate and clarify ideas through discussion with peers and adults to develop design criteria including appearance, taste, texture, aroma for an appealing product for a particular user and purpose. Is able to design healthy pasta dish, drawing and labelling.</p> <p>Make Is able to prepare ingredients using a range of cutting, grating, mixing and peeling skills. Is able to prepare the appropriate utensils needed. Is able to measure ingredients accurately. Is able to follow a method.</p> <p>Evaluate Is able to use their design criteria to evaluate their ongoing</p>

	<p>evaluate their completed product.</p> <p>Technical knowledge Understands how simple electrical circuits and components can be used to create functional products.</p>	<p>Evaluate Is able to use their design criteria to evaluate their completed product. Test and evaluate a range of fastenings, for example: zipper, button, press stud and velcro.</p> <p>Technical knowledge</p> <p>To know that a fastening is something which holds two pieces of material together for example a zipper, toggle, button, press stud and velcro. To know that different fastening types are useful for different purposes. To know that creating a mock up (prototype) of their design is useful for checking ideas and proportions.</p>	<p>work and completed product. Is able to carry out sensory evaluations of a variety of ingredients and products.</p> <p>Technical knowledge Know how to use appropriate equipment and utensils to prepare and combine food. Know about a range of fresh and processed ingredients appropriate for their product, and whether they are grown, reared or caught.</p>
<p>Year 5</p>	<p>Create a moving solar system (using cams, pulleys and gears to create movement)</p> <p>Design Is able to generate innovate ideas drawing on research. Is able to develop a simple design specification to guide their idea. Is able to use cross-sectional drawings to develop and communicate their ideas. Is able to explain their choice of materials and components according to functional properties.</p> <p>Make Is able to accurately join, assemble and combing materials and components. Is able to work with alternative materials (wood, joins) Understands how mechanical systems such as cams or pulleys or gears create movement. Understands how to reinforce and strengthen a 3D framework. Is able to test the strength of butt, mitre and</p>	<p>Design a whole year group tapestry using embroidery</p> <p>Design Is able to indicate the design features of their products that will appeal to intended users. Is able to identify the needs and wants of particular individuals and groups through research using surveys and interviews. Is able to generate innovate ideas drawing on research. Is able to develop a simple design specification to guide their idea. Develop, model and communicate ideas through talking, drawing, templates and mock-ups.</p> <p>Make Is able to use a herringbone, cross and blanket stitch. Is able to measure, mark out, cut and shape materials. Is able to assemble, join and combine materials and components.</p>	<p>To create a balanced breakfast</p> <p>Design Is able to follow procedures for safety and hygiene. Is able to design a balanced nutritional breakfast cereal.</p> <p>Make Is able to prepare and cook a healthy meal. Cutting and preparing ingredients safely. Using equipment safely, including knives, hot pans and hobs. Knowing how to avoid cross-contamination. Following a step by step method carefully to make a recipe.</p> <p>Evaluate Is able to use their design criteria to evaluate their completed product.</p> <p>Technical knowledge Understands that seasons may affect the food available. Is beginning to understand that different food and drink contain different substances (nutrients, water and fibre). To know that I can adapt a recipe to make it healthier by substituting ingredients.</p>

	<p>dovetail join.</p> <p>Evaluate Is able to critically evaluate the quality of the design of their products as they design and make them. Compare the final product to the original design specification. Test products with intended user and critically evaluate the quality of design, functionality and purpose. Consider views of others to improve work.</p> <p>Technical knowledge Understand how gears and pulleys can be used to speed up, flow down or change the direction of movement.</p>	<p>Select from and use a range of tools and equipment to make products that are assembled and well finished.</p> <p>Evaluate Is able to critically evaluate the quality of the design of their products as they design and make them. Investigate and analyse textile products linked to final product.</p> <p>Technical knowledge A 3D textile product can be made from a combination of accurately made pattern pieces, fabric shapes and different fabrics. Fabrics can be strengthened, stiffened and reinforced where appropriate.</p>	<p>To know that I can use a nutritional calculator to see how healthy a food option is. To understand that 'cross-contamination' means that bacteria and germs have been passed onto ready-to-eat foods and it happens when these foods mix with raw meat or unclean objects.</p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Year 6</p>	<p>Design and make a model playground using structures and cams</p> <p>Design Is able to confidently carry out research, using surveys, interviews, questionnaires and web-based resources. Is able to identify the needs, wants, preferences and values of particular individuals and groups. Is able to model their ideas using prototypes and use computer- aided design to develop and communicate their ideas. Is able to make design decisions taking account of the constraints such as time, resources and cost. Is able to explain their choice of materials and components based on aesthetic qualities. Is able to explain their choice of tools and equipment in relation to the skills and techniques they will be using.</p> <p>Make Is able to demonstrate resourcefulness</p>	<p>To design and create a poppy that can be worn</p> <p>Design Is able to indicate the design features of their products that will appeal to intended users. Is able to identify the needs and wants of particular individuals and groups through research using surveys and interviews. Is able to generate innovate ideas drawing on research. Is able to develop a simple design specification to guide their idea.</p> <p>Make Is able to use stitch patterns and embroidery. Is able to use a herringbone, chain, cross and blanket stitch. Is able to measure, mark out, cut and shape materials. Is able to assemble, join and combine materials and components.</p>	<p>To create a healthy dish including pastry or dough.</p> <p>Design Is able to follow procedures for safety and hygiene. Generate ideas through research and discussion with peers and adults to develop a design brief and criteria for a design specification. Use words, annotated sketches and information communication technology as appropriate to develop and design ideas.</p> <p>Make Is able to develop an understanding of basic pastry making (shortcrust pastry tarts/ pies). Is able to follow a step by step set of instructions. Select and use appropriate utensils and equipment accurately to measure and combine ingredients.</p> <p>Evaluate Is able to use their design criteria to evaluate their completed product. Carry out sensory evaluations of a range of relevant products and ingredients. Evaluate the final product in comparison to design brief.</p>



Mere Green Primary School DT Progression Overview



	<p>when tackling practical problems. Is able to accurately join, assemble and combing materials and components. Is able to work with alternative materials (wood, joins) Understands how mechanical systems such as cams or pulleys or gears create movement. Understands how to reinforce and strengthen a 3D framework. Is able to test the strength of butt, mitre and dovetail join.</p> <p>Evaluate Is able to explain how particular parts of their products work. Is able to critically evaluate the quality of the manufacture and fitness for purpose of their product</p> <p>Technical knowledge</p> <p>To understand what a 'footprint plan' is. To understand that in the real world, design can impact users in positive and negative ways. To know that a prototype is a cheap model to test a design idea.</p>	<p>Evaluate Is able to critically evaluate the quality of the design of their products as they design and make them.</p> <p>Technical knowledge</p> <p>To understand that it is important to design accessories with the client/ target customer in mind. To know that using a template (or pattern) helps to accurately mark out a design on fabric. To understand the importance of consistently sized stitches.</p>	<p>Technical knowledge</p> <p>Understands how food is processed into ingredients that can be eaten or used in cooking. Understands that seasons may affect the food available. Understands that different food and drink contain different substances (nutrients, water and fiber).</p>
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