



Progression of skills	Nursery	Reception	Year One	Year Two	Year Three	Year Four	Year Five	Year Six
<b>Processes</b>			<p>I can ask simple questions about existing products and those that I have made.</p> <p>I can use pictures or words to describe my ideas for a product.</p>	<p>I can design a purposeful, functional, appealing product for myself/other users based on a design criteria.</p> <p>I can generate, develop, model and communicate my ideas through discussions, drawings, mock-ups and through the use of research (ICT)</p>	<p>I can use my knowledge of existing products to design my own functional product.</p> <p>I can investigate and analyse existing products and those that I have made, considering the design brief.</p>	<p>I can create designs using exploded diagrams</p> <p>I can consider how existing products and my own finished products might be improved and how well they meet the needs of the intended user.</p> <p>I can use my knowledge of existing products to design a functional and appealing product for a particular purpose and audience.</p>	<p>I can create prototypes to show my ideas.</p> <p>I can produce step by step plans to guide my making, demonstrating that I can apply my knowledge of different materials, tools and techniques.</p> <p>I can make detailed evaluations about existing products and my own products whilst considering the views of others to improve my work</p>	



DT PROGRESSION OF SKILLS MAP



<p><b>Textiles:</b></p>	<p>I can make simple models which express my ideas.</p> <p>I can explore different materials and use all senses to investigate them.</p>	<p>I can develop their own ideas and then decided which materials to use to express them.</p> <p>I can create collaboratively sharing ideas, resources and skills.</p> <p>I can make use of props and materials when roleplaying characters in narratives and stories.</p> <p>I can safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.</p>		<p>I can use a needle and thread to perform a running stitch and/or an overstitch to join fabrics together</p> <p>I can evaluate products I have made against the design criteria.</p>	<p>I can safely measure, mark out and cut materials with some accuracy.</p> <p>I can use a running stitch, back stitch and cross stitch to join and finish fabrics accurately.</p> <p>I can make suitable choices from a wider range of tools and unfamiliar materials and plan out the main stages of using them.</p>	<p>I can use techniques which require more accuracy to cut, shape, join and finish my work e.g. cutting internal shapes, slots in frameworks</p> <p>I can use my knowledge of techniques and the functional and aesthetic qualities of a wide range of materials to plan how to use them.</p>	<p>I can make careful and precise measurements so that joins, holes and openings are in exactly the right place.</p>	
<p><b>Mechanisms</b></p>			<p>I can use scissors, glue and paperclips to cut, join and combine materials safely.</p>	<p>I can explore and use mechanisms such as wheels and axels to create a moving vehicle.</p>				
<p><b>Construction</b></p>	<p>I can explore different materials freely, in order to develop their ideas about how to use them and what to make.</p>	<p>I can make imaginative and complex 'small worlds'</p>	<p>I can build structures, exploring how they can be made</p>	<p>I can safely measure and cut materials and components using a Coping Saw.</p>	<p>I can strength frames using diagonal struts</p>	<p>I can apply techniques I have learnt to strengthen structures and</p>	<p>I can build more complex 3D structures and apply my knowledge of</p>	<p>I can apply my knowledge of materials and techniques to refine and</p>



DT PROGRESSION OF SKILLS MAP



Pinner Wood School



	<p>I can join different materials and explore different textures.</p>	<p>with blocks and construction kits</p> <p>I can create collaboratively sharing ideas, resources and skills</p>	<p>stronger, stiffer and more stable.</p>	<p>I can build structures and discuss how they can be made stronger, stiffer and more stable.</p>	<p>I can create designs using annotated sketches, cross-sectional diagrams and simple computer programmes</p>	<p>explore my own ideas</p>	<p>strengthening techniques to make them stronger or more stable</p> <p>I can understand how to use more complex mechanical systems (gears, pulleys, cams, levers and linkages)</p>	<p>rework my product to improve its functional properties and aesthetic qualities.</p> <p>I can use my knowledge of famous designs to further explain the effectiveness of existing products and products I have made.</p> <p>I can use a wide range of methods to strengthen, stiffen and reinforce complex structures and I can use them accurately and appropriately.</p> <p>I can apply my understanding of computing to program, monitor and control my product.</p>
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<p><b>Electrical systems</b></p>						<p>I can understand and use electrical systems in products</p>	<p>I can understand how to use more complex electrical systems (series circuits incorporating switches, bulbs, buzzers and motors)</p>	<p>I can use technical knowledge accurate skills to problem solve during the making process.</p> <p>I can apply my understanding of computing to program, monitor and control my product (code.org/scratch).</p>
<p><b>Food and Nutrition</b></p>	<p>I can show a preference for a dominant hand</p> <p>I can make healthy choices about food and drink.</p>	<p>I can talk about the different factors that support their overall health and wellbeing: healthy eating</p> <p>I can use a range of tools competently, safely and confidently (scissors, knives, forks and spoons)</p>	<p>I can discuss what I eat at home</p> <p>I can name some healthy foods</p> <p>I can explain where some food comes from</p> <p>I can name some foods that are grown</p> <p>I can use simple tools with help to prepare food safely (butter knife, fork,</p>	<p>I can explore the need for a variety of food in a healthy, balanced diet</p> <p>I can understand that all food has to be farmed, grown or caught.</p> <p>I can use a wider range of cookery techniques to prepare food safely (cutting with a knife – bridge method, juicing, snipping with scissors, spooning,</p>		<p>I can understand what makes a healthy and balanced diet, and that different foods and drinks provide different substances the body needs to be healthy and active.</p> <p>I can understand seasonality and the advantages of eating seasonal and locally produced food</p>	<p>I can understand the main food groups.</p> <p>I can understand the different nutrients that are important for health.</p> <p>I can understand how a variety of ingredients are grown, reared, caught and processed to make them safe</p>	<p>I can confidently plan a series of healthy meals based on the principles of a healthy and varied diet.</p> <p>I can research, plan, prepare and cook a savoury dish, applying my knowledge of ingredients and the cooking skills I have learnt.</p>





			chopping board, mixing spoon).	spreading and stirring).  I can understand simple food hygiene by washing my hands, tying up hair and wearing an apron before handling food.		I can read and follow recipes which involve several processes, skills and techniques	and tasty to eat (palatable).  I can select appropriate ingredients for a chosen product  I can use a wide range of techniques to combine foods  I can use my own research of existing products and market research to inform the design of my own innovative product.	I can use information on food labels to inform choices.
<b>Key Vocabulary</b>	Construct Stack Vertically Horizontally Spaces Build Balance Purpose Resources Adapts Tools Techniques	Materials Tools Techniques Safety Experimenting Design Texture Form Function Ideas Selecting Processes	<b>Structures;</b> Freestanding structure Frame structure Shell structure Buttress Brick bonding Mock-up  <b>Mechanisms;</b> Mechanism Lever	<b>Textiles:</b> Appliqué Design Evaluate Glove puppet Mock-up Sew Running Stitch Template  <b>Mechanisms:</b> Axle	<b>Textiles:</b> Appliqué Pattern/Template Seam Seam Allowance Prototype Aesthetics Running Stitch Cross Stitch	<b>Mechanical systems;</b> Mechanism Lever Linkage Slot Guide or bridge Loose pivot Fixed pivot System	<b>Structures:</b> Modelling Compression Strut Tension Tie Diagonal Horizontal Vertical Triangulation Frame structure	<b>Mechanical systems;</b> Pulley Gear Drive belt Gearing up or down Mechanical system Driver Follower Mesh





<p>Assemble Shape Join Props Role-play Experiences Responses Media</p>	<p>Decisions Media Combined Changed Uses Purposes Ideas Thoughts Feelings Products Features Differences Strengths</p>	<p>Slider Slot Guide or Bridge</p> <p><b>Food;</b> Fruit Vegetable Nutrients Pith Salad Sensory Evaluation</p>	<p>Axle holder Chassis Friction Dowel</p> <p><b>Food and Nutrition:</b> Ingredients Taste Smell Starchy Carbohydrate Texture Appearance Design Evaluate</p> <p><b>Inventors:</b> Karl Benz – first motor wagon</p> <p>The Wright Brothers – aircraft</p> <p>George Stephenson – first steam locomotive</p>	<p><b>Structures;</b> Cuboid Edge Face Font Net Prism Scoring Shell structure Vertex</p> <p><b>Food and Nutrition:</b> Appearance Texture Sensory evaluation Preference test Strawberry huller Processed food Bread</p> <p><b>Inventors:</b> -Mary Anderson (invented windscreen wipers) -Trevor Baylis (made wind up radio)</p>	<p><b>Electrical systems:</b> Circuit Conductor Insulator Prototype Push-to-break switch Push-to-make switch Toggle switch System Output devices Input devices</p> <p><b>Inventors:</b> -Stephanie Kwolek: Kevlar (industrial fibres that lots of products are made from e.g. bullet proof vests, and lots more clothing materials).  -Alec Issigonis (invented the mini car)</p>	<p><b>Food and Nutrition:</b> Finishing Rubbing in Bran Healthy Snack Bar Endosperm Germ Yeast</p> <p><b>Textiles:</b> Mock up Pattern or template Seam allowance Specification Tacking Working drawing</p> <p><b>Inventors:</b> -James Dyson (made the Dyson Hoover) -Marie Van Brittan Brown (Home security systems with cameras)</p>	<p>Motor spindle</p> <p><b>Electrical systems;</b> Modelling Open switch Closed switch Normally open Normally closed Computer control input Output devices Input devices</p> <p><b>Inventors:</b> -Bill Gates (Microsoft) -Josephine Cochrane (invented the dishwasher)</p> <p>-Maria Beasley (she created a raft that could be folded for storage but unfolded quickly in an emergency)</p>
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