

	<b>By the end of Reception</b>	<b>By the end of Year 2</b>	<b>By the end of Year 4</b>	<b>By the end of Year 6</b>
<b>Food</b>	<p>To experience cooking in small groups.</p> <p>To know that hands must be washed when cooking and touching food.</p> <p>To have used a knife to cut with.</p> <p>To mix given, measured ingredients in a bowl.</p> <p>Understand that there are foods that are natural and man made.</p>	<p>Understand that foods have different tastes, smells and textures.</p> <p>Group food products into simple groups – fruits, vegetables, meat etc</p> <p>To cut, peel, grate and chop foods safely.</p> <p>To be able to follow a simple recipe in groups with support.</p> <p>To know safety and hygiene rules for cooking and food preparation.</p> <p>To understand diets and need for variety and balance.</p> <p>Weigh using cups and spoonfuls and measure using standard units with support. i.e g, Kg, ml, l</p>	<p>To describe foods using increased vocabulary for texture, smells and tastes – sweet, smooth, and hot/cold.</p> <p>Group food products into food groups – carbohydrate, protein, fats, vitamins and minerals</p> <p>To plan and design food / recipes to be made.</p> <p>To be able to follow a simple recipe with more independence.</p> <p>To make healthy food choices.</p> <p>To be able to choose, join and combine ingredients</p> <p>To measure and weigh using appropriate standard measures.</p> <p>To cut and shape ingredients using appropriate tools and equipment e.g. grating</p>	<p>To select and prepare foods for a purpose.</p> <p>To change ingredients in known recipes to improve / change recipes.</p> <p>To suggest improvements to own work.</p> <p>To measure and weigh using imperial measures.</p> <p>To understand differences between different ingredient combining methods – mixing, beating, folding,</p> <p>To cook using a variety of different cooking methods and equipment.</p> <p>To prepare food products taking into account the properties of ingredients and sensory characteristics</p> <p>To taste a range of ingredients, food items to develop a sensory food vocabulary for use when designing.</p> <p>To work within a budget</p> <p>To cut and shape ingredients using appropriate tools and equipment e.g. grating.</p>
<b>Electrical</b>	<p>To have an understanding of battery powered toys.</p> <p>Explore and disassemble simple electrical mechanisms – i.e torches.</p>	<p>To use simple circuits to add one component such as a bulb or buzzer into a model.</p> <p>To know safety issues when working with electricity.</p>	<p>To make a simple circuit with one component such as a bulb, buzzer or motor into a model.</p>	<p>To create circuits independently to control motor / lights in a model.</p> <p>To make circuits with switches and experiment with better ways to make switches.</p> <p>To incorporate electrical circuits into work to suit a purpose.</p> <p>To use knowledge of circuits to adjust and refine to better suit the purpose – ie. Adding extra components or longer /thicker wires to slow / dim working parts.</p>

<h1>Stiff materials</h1> <p>(wood and plastics)</p>	<p>To construct simple models from different materials.</p> <p>To join materials in a variety of simple permanent and non-permanent ways.</p>	<p>To cut materials using hacksaws and bench hooks with support.</p> <p>To use a simple pre-made templates to draw around and mark out materials for cutting.</p> <p>To mark materials for cutting by measuring with support.</p> <p>To join materials with glue.</p> <p>Explain how to make something stronger</p>	<p>To measure materials for cutting independently.</p> <p>To create templates to draw around and mark out materials for cutting.</p> <p>To cut materials using hacksaws and bench hooks more independently.</p> <p>To join and combine using fixed or moving joints.</p> <p>To cut and join straight edges for perpendicular joints. (butt)</p> <p>To make independent choices in with sheet material to use.</p> <p>To cut internal shapes into materials.</p> <p>To combine materials by cutting slots into two separate pieces.</p>	<p>To cut materials safely and independently.</p> <p>To mark materials for cutting within mm of accuracy.</p> <p>To cut and join angled edges for joining (mitre)</p> <p>To join structures in a variety of ways, exploring how to make joints more stable.</p> <p>To choose appropriate materials to suit a purpose.</p> <p>To use hand drills independently to make holes.</p> <p>To use a glue gun with join materials.</p> <p>To use bradawl to mark hole positions</p>
<h1>Mechanics</h1>	<p>To know that toys have mechanisms.</p> <p>To explore how different objects move and are manoeuvrable.</p>	<p>To create and explore simple mechanisms using constructions kits.</p> <p>To be able to explain and describe movements made by objects.</p> <p>To suggest possible ideas for movement in their own work.</p> <p>To assemble and join materials to incorporate movement in non-permanent ways – ie. Use split pins, wheels, simple winding up mechanisms.</p> <p>To understand and create simple pop-up mechanisms.</p>	<p>To plan own mechanisms to use in models.</p> <p>To join mechanisms in a variety of ways to create moving parts.</p> <p>To explore and assemble simple lever mechanisms to make parts move / see-saw.</p> <p>To understand how pneumatics can be used to make an object move.</p> <p>To understand how valves work in pneumatic systems.</p> <p>To use a variety of materials to create stable moving parts, selecting materials based on their properties.</p> <p>To create more complex pop-up designs and models.</p>	<p>To independently plan and make models using different mechanisms.</p> <p>To create models with more than one moveable part.</p> <p>To explore and assemble different classes of levers and incorporate into models.</p> <p>To begin to explore and understand how a CAM works to move parts up and down.</p> <p>To begin to explore how gears work to speed up / slow down a moving part.</p> <p>To select appropriate type of mechanism to suit a purpose.</p>

<h1>Mouldable materials</h1>	<p>To experience a variety of different mouldable materials.</p> <p>Use clay tools to cut, mould and shape mouldable materials.</p> <p>To explain what the finished piece is.</p>	<p>To use clay to design items for a purpose. (flat and simple 3d)</p> <p>To mould other materials into shapes and structures – i.e newspapers, wires, straws.</p> <p>To discuss the qualities of their materials and explain why they use them.</p> <p>To be able to join materials using appropriate techniques.</p> <p>To check the finished product for its purpose, ensuring it meets criteria for what it was supposed to do.</p>	<p>To use clay to design items for a purpose. More complex 3d structures)</p> <p>Use glazes / paints to finish / decorate clay.</p>	<p>To use mouldable materials with confidence to create prototypes of other projects.</p> <p>To be able to cut own mouldable materials</p> <p>Use techniques to mould 3d images.</p> <p>To be able to attach materials so they will not break / crack.</p> <p>To use mouldable materials for a purpose.</p> <p>To use different decorating techniques to create textures and patterns in finished designs.</p> <p>To experience firing clay in a Kiln. Use glazes to finish images / models.</p>
<h1>Textiles</h1>	<p>To begin to use textiles in models – threading.</p>	<p>To join fabrics using glue, staples and tapes.</p> <p>To use a variety of different textile materials and fabrics in work.</p> <p>Use of glue to attach objects for decoration such as beads and sequins.</p> <p>To be able to sew with support using a simple running stitch into pre-holed materials.</p> <p>To begin cutting own fabrics for a purpose.</p>	<p>To join two materials using running stitch.</p> <p>To understand seam allowance.</p> <p>To use different forms of stitching into materials.</p> <p>To choose own materials and threads.</p> <p>To understand the need for pattern in their work.</p> <p>To attach objects such as sequins and beads when stitching.</p> <p>To evaluate final products against its purpose.</p>	<p>To create 3D products for a purpose using textiles skills.</p> <p>To know how to pin and tack materials to create non-permanent joins.</p> <p>To be able to accurately measure, cut and se own materials with mm degree of accuracy.</p> <p>To use sewing as a joining technique for fabrics, papers and cards.</p> <p>To be able to sew and join using different types of stitch.</p> <p>To experiment with decorative stitching.</p> <p>To attach objects such as sequins and beads when stitching.</p> <p>To stuff products independently for a purpose. .</p> <p>To begin to use a sewing machine with support to create more accurate joins.</p>

<h1>Flexible materials</h1> <p>(card)</p>	<p>To construct simple models from different materials.</p> <p>To cut materials with scissors with little or no help.</p> <p>To join materials in a variety of ways using tapes, glues, clips.</p> <p>To choose materials from those provided.</p>	<p>To cut materials along a drawn line either straight or curved.</p> <p>To fold, tear and cut materials for a purpose.</p> <p>To join materials in a variety of permanent and non-permanent ways.</p> <p>To make choices of which materials to use.</p>	<p>To measure materials for cutting independently.</p> <p>To create templates to draw around and mark out materials for cutting.</p> <p>To cut materials using a variety of tools.</p> <p>To join and combine using fixed or moving joints.</p> <p>To make independent choices in with sheet material to use.</p> <p>To cut internal shapes into materials.</p> <p>To combine materials by cutting slots into two separate pieces.</p>	<p>To cut materials safely and independently.</p> <p>To mark materials for cutting within mm of accuracy.</p> <p>To join structures in a variety of ways, exploring how to make joints more stable.</p> <p>To use craft knives, cutting boards and safety rules with support.</p> <p>To choose appropriate materials to suit a purpose.</p>
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