



## JLPS Curriculum overview for : Design & Technology

Year group	Main theme/skills/knowledge/context
R	<p><b>Exploring and using materials and media</b></p> <ul style="list-style-type: none"> <li>• Manipulates materials to achieve a planned effect.</li> <li>• Constructs with a purpose in mind, using a variety of resources.</li> <li>• Uses simple tools and techniques competently and appropriately.</li> <li>• Select appropriate resources and adapt work where necessary.</li> <li>• Selects tools and techniques needed to shape, assemble and join materials they are using.</li> </ul> <p><b>To safely use and explore</b> a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.</p> <p><b>Being Imaginative</b> • Children use what they have learnt about media and materials in original ways, thinking about uses and purposes. They represent their own ideas, thoughts and feelings through design and technology, art, music, dance, role play and stories.</p>
1	<ul style="list-style-type: none"> <li>• Design purposeful, functional &amp; appealing products</li> <li>• Generate, model &amp; communicate ideas</li> <li>• Use range of tools &amp; materials to complete practical tasks</li> <li>• Evaluate existing products &amp; own ideas</li> <li>• Build and improve structure &amp; mechanisms</li> <li>• Understand where food comes from</li> </ul> <p><b>Contexts:</b> Through cross-curricular links: science /plants, Geog/World and climate, flight, Music/instruments.</p>
2	<ul style="list-style-type: none"> <li>• Design purposeful, functional &amp; appealing products</li> <li>• Generate, model &amp; communicate ideas</li> <li>• Use range of tools &amp; materials to complete practical tasks</li> <li>• Evaluate existing products &amp; own ideas.</li> <li>• Build and improve structure &amp; mechanisms</li> <li>• Understand where food comes from</li> </ul> <p><b>Contexts:</b> The seaside, Christmas, recycled materials, Elizabethan houses/houses and homes. Foodchains</p>
3	<ul style="list-style-type: none"> <li>• Design purposeful, functional &amp; appealing products</li> <li>• Generate, model &amp; communicate ideas</li> <li>• Use range of tools &amp; materials to complete practical tasks</li> <li>• Develop design ideas and criteria with end user in mind</li> <li>• Use practical skills to join, assemble and combine materials</li> <li>• To know how food is grown and how to prepare a savoury dish.</li> </ul> <p><b>Contexts:</b></p>
4	<ul style="list-style-type: none"> <li>• Design purposeful, functional &amp; appealing products</li> <li>• Generate, model &amp; communicate ideas</li> <li>• Use range of tools, materials and components to complete products fitting their own design criteria</li> <li>• Develop design ideas and evaluate the final products.</li> <li>• To make products work. Pulleys, circuits etc</li> <li>• Investigate and analyse existing products.</li> <li>• To understand and prepare healthy foods in hygienic conditions.</li> </ul> <p><b>Context:</b> Cross Curricular science/Electrical circuits, digestive system and teeth,</p> <p style="text-align: center;">Electrical Circuits</p>
5	<ul style="list-style-type: none"> <li>• To use research to generate innovative ideas</li> <li>• Generate, model &amp; communicate ideas using diagrams and step by step planning.</li> <li>• Use range of tools, materials and components to complete products fitting their own design criteria</li> <li>• To use practical skills and techniques accurately               <ul style="list-style-type: none"> <li>• To know about key designers</li> <li>• Investigate and analyse existing products.</li> <li>• To understand how food is processed into edible state.</li> </ul> </li> </ul>

	Context: Science /reversible changes History/castles		
	Looking at functionality and purpose of Greek pots. Develop design sheet and create final product from clay. Use a variety of tools for image making. Introduce modern architects and compare Greek inspired features.	Looking at functionality of castles and their design. Plan a castle with key features and a workable design to be created from 3D materials. Modern 3D functional designers	Linked project with rivers and coastlines. Looking at River formation and designing a model of the flow of a river. Looking at artists of coastlines and rivers (Kurt Jackson etc)
6	<ul style="list-style-type: none"> <li>• Design purposeful, functional &amp; appealing products</li> <li>• To use research to generate innovative ideas</li> <li>• Generate, model &amp; communicate ideas using diagrams and step by step planning.</li> <li>• Use a range of tools, materials and components taking account of time, resources and cost.</li> <li>• To use practical skills and techniques accurately</li> <li>• To know about key designers and products</li> <li>• To evaluate own products against original design</li> <li>• To know that food and drink contain different substances. Nutrients, water and fibre for health</li> </ul>		
	Context: Science /micro organisms History/shelters		
	WW2 Shelters Looking at functionality and purpose of WW11 shelters. Plan and create a 3D model.	Shakespearian Masks Looking at purpose of masks and purpose. Use planning sheet to research, design and create a mask. Explain the features.	Make do & Mend Looking at history and purpose of MD&M. Research and practise sewing, alteration and complete a final project.

