

# Design Technology

## Year 5 and 6

### Summer



<b>Topic North America and Mexico</b> Make a Mexican rug.																																																							
<b>Rationale</b> Creating the cross-curricular links between Geography, History, and the study of textiles in DT the children will have a real purpose for their learning and real end product. At this point the children will be able to choose from a number of skills they have learned throughout key stage 1 and 2 in order to select the best method for making their rug.																																																							
<b>NC Objective</b> <ul style="list-style-type: none"> <li>• Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at individuals or groups</li> <li>• Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer aided design</li> <li>• Select from and use a wider range of tools and equipment to perform practical tasks for example, cutting, shaping, joining, and finishing, accurately</li> <li>• Select from and use a wider range of materials and components including construction materials, textiles, and ingredients, according to their functional properties and aesthetic qualities Investigate and analyse a range of existing products.</li> <li>• Investigate and analyse a range of existing products.</li> <li>• Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.</li> <li>• Understand how key events and individuals in design and technology have helped shape the world.</li> </ul>																																																							
<b>Links to other Subject/Topics.</b> <b>Geography</b> – North America and Mexico <b>English</b> – Non-chronological Report, Advertisements. <b>History</b> – Ancient Civilisation - Maya																																																							
<b>Inspiration for Aspiration</b> Archaeologist, Anthropologist, Weaver, Textile teacher, Tailor, Artist,																																																							
<b>Key Content</b> <b>Textiles</b> <ul style="list-style-type: none"> <li>• What is the design of a traditional Mexican rug?</li> <li>• Can I learn the skills of rag rugging?</li> <li>• Can I make a traditional Mexican rug?</li> <li>• Have I made a traditional Mexican rug?</li> </ul>																																																							
<b>Concepts</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="background-color: #ffff00;">Design Technology</th> <th>1</th> <th>2</th> <th>3</th> <th>4</th> <th>5</th> <th>6</th> </tr> </thead> <tbody> <tr> <td style="background-color: #ffff00;">Design, Make, Evaluate</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Structures</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Mechanisms</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Electrical</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="background-color: #ffff00;">Textiles</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Food and Nutrition</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>							Design Technology	1	2	3	4	5	6	Design, Make, Evaluate							Structures							Mechanisms							Electrical							Textiles							Food and Nutrition						
Design Technology	1	2	3	4	5	6																																																	
Design, Make, Evaluate																																																							
Structures																																																							
Mechanisms																																																							
Electrical																																																							
Textiles																																																							
Food and Nutrition																																																							
<b>Skills Year 3/4</b> <b>Design</b> <ul style="list-style-type: none"> <li>• Show design meets a range of requirements and is fit for purpose</li> <li>• Begin to create own design criteria</li> <li>• Produce a plan and explain it to others</li> <li>• Include an annotated sketch</li> </ul>			<b>Skills Year 5/6</b> <b>Design</b> <ul style="list-style-type: none"> <li>• Draw on market research to inform design</li> <li>• Use research of user's individual needs, wants, requirements for design</li> <li>• Create own design criteria and specification</li> </ul>																																																				

<ul style="list-style-type: none"> <li>• Make and explain design decisions considering resources</li> <li>• Begin to use ICT to show design</li> </ul> <p><b>Make</b></p> <ul style="list-style-type: none"> <li>• Select suitable tools and equipment, explain choices in relation to required techniques and use accurately</li> <li>• Select appropriate materials, fit for purpose; explain choices</li> <li>• Work through plan in order</li> <li>• Measure, mark out, cut, and shape materials/ components with some accuracy</li> <li>• Assemble, join and combine materials and components with some accuracy and apply some finishing techniques</li> </ul> <p><b>Evaluate</b></p> <ul style="list-style-type: none"> <li>• Refer to design criteria while designing and making and use it to evaluate product</li> <li>• Begin to explain how I could improve original design</li> <li>• Evaluate existing products, considering how well they've been made, materials, whether they work, how they have been made, fit for purpose</li> <li>• Know about some inventors/designers/ engineers/chefs/ manufacturers of ground-breaking products</li> </ul> <p><b>Technical Knowledge</b> <b>Textiles</b></p> <ul style="list-style-type: none"> <li>• Understand that a simple fabric shape can be used to make a 3D textiles project</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• Use annotated sketches, cross-sectional planning and exploded diagrams</li> <li>• Make design decisions considering resources and cost</li> <li>• Clearly explain how parts of design will work, and how they are fit for purpose</li> <li>• Independently model and refine design ideas by making prototypes and using pattern pieces</li> <li>• Use ICT to create designs</li> </ul> <p><b>Make</b></p> <p>Use selected tools and equipment precisely</p> <ul style="list-style-type: none"> <li>• Select appropriate materials, fit for purpose; explain choices, considering functionality and aesthetics</li> <li>• Create, follow, and adapt detailed step-by-step plans</li> <li>• Explain how product will appeal to audience; make changes to improve quality</li> <li>• Accurately measure, mark out, cut and shape materials/components</li> <li>• Accurately assemble, join and combine materials/components</li> <li>• Be resourceful with practical problems</li> </ul> <p><b>Evaluate</b></p> <ul style="list-style-type: none"> <li>• Evaluate ideas and finished product against specification, stating if it's fit for purpose</li> <li>• Explain what would improve it and the effect different resources may have had</li> <li>• Do thorough evaluations of existing products considering how well they've been made, materials, whether they work, how they've been made, fit for purpose</li> <li>• Evaluate how much products cost to make and how innovative they are</li> <li>• Consider the impact of products beyond their intended purpose</li> <li>• Discuss some key inventors/designers/ engineers/ chefs/manufacturers of ground-breaking products</li> </ul> <p><b>Technical Knowledge</b> <b>Textiles</b></p> <ul style="list-style-type: none"> <li>• Discuss user's wants/needs and aesthetics when choosing textiles</li> <li>• Think about how product might be sold</li> </ul>	
<p><b>Y3/4 DT Vocabulary</b></p> <p>technique Templates Stiffening Seam allowance Annotated sketch Prototype Back stitch Running stitch Tacking hessian Cross stitch Loom Pinking Shears</p>	<p><b>Y5/6 Design Technology Vocabulary</b></p> <p>rag rug hook rag rugger rug latch hook Design Make Evaluate Textiles Material Symmetrical pattern rag rug fabric pattern material wool</p>	<p><b>Y5/6 Topic Specific Vocabulary</b></p> <p>rag rug fabric pattern material wool Zapotec Rugs: These are traditional Mexican rugs woven by the Zapotec people of Oaxaca, Mexico. They are known for their intricate designs and vibrant colours. Natural Dyes Oaxaca: A region in southern Mexico known for its cultural heritage and traditional crafts, including Zapotec rug weaving. Symbolism: Mexican rug designs may incorporate symbols that hold cultural or spiritual significance to the Zapotec people, such as animals, plants, and geometric shapes. Tradition</p>

**By the end of the topic children will be able to successfully answer the following questions: -**

**Textiles**

- Can I design a traditional Mexican rug?
- Can I learn the skills of rag rugging?
- Can I make a traditional Mexican rug?
- Can I evaluate a traditional Mexican rug?

**Assessment**

Fact file of design/designer or invention/inventor, in book.

Design, in book.

Observation of use of skills taught in finished product.

Observation assessment of finished product – is it fit for purpose?

Evaluation of finished product, in book.