

INSPIRE Curriculum Synopses: Design and Technology



<p><u>Year 3</u></p> <p>The topic of Bridges allows pupils to explore structures and how buildings and houses are kept in place.</p> <p>They plan, create and evaluate their structure and ensure it is fit for the purpose, strong and sturdy. The children are developing the skills of following a <u>step by step</u> plan, choosing the right equipment and materials, selecting the most appropriate tools and techniques for a given task and working accurately to measure, make cuts and make holes. This works leads to Year 4 DT of aqueducts in their Ancient Romans topic and sculptures of butterflies in the Rainforest topic.</p> <p>During the Spring 2 term children strengthen their planning, designing, creating and evaluating skills from Year 2's topic of Mechanism's where they developed their own space buggies.</p> <p>In collaboration with our topic on The Maya, where children learn about the how the Maya used cocoa beans, the children will produce their own original chocolate bars. They will also design the packaging and create advertisements for their new chocolate bars.</p> <p>In our final DT unit children explore, test materials and create a pneumatic system to move their creations with air. The topic links to our History and Geography units on Egypt and The River Nile as the children will create their own mummy's tomb that they can open and close with a pneumatic system. This again builds on from the creation of space buggies in Year 2 and build on the design, make and evaluate sequence.</p>	<p><u>Year 4</u></p> <p>Pupils plan, design and create a steady hand game incorporating their learning from science and applying their understanding of electrical circuits.</p> <p>The children link their DT to their learning about the Ancient Romans and plan, design and create their own Aqueduct structure, ensuring the exploration of how to reinforce paper and create a <u>water tight</u> system.</p> <p>In DT the pupils will look at creating paper mechanisms that will be incorporated into a pop-up book designed to teach KS1 CHN about the rainforest.</p>	<p><u>Year 5</u></p> <p>During this term to develop the children's DT skills gained in year two where they sewed a beach bag they research and produce a diagram and a detailed plan of a Tudor rose. They practise the stitches required which they then use on appropriate material to produce their final work.</p> <p>These skills are then developed in year six where they move onto weaving. Pupils study a range of methods to make Spanish omelettes and produce a detailed plan for their own version. They compare their plans with those of others and evaluate them. Selecting and using a range of cooking utensils, they follow their recipes to produce their meal, building on the hygiene and safety procedures that they learned in Year 5. They present their food for sharing and evaluate <u>each others'</u> work.</p> <p>During this term, children plan a design for a rag rug, developing their design skills from earlier this year. Examining the fabrics available, they choose materials according to aesthetic properties. They sort, cut and shape fabrics and experiment with ways of joining them, choosing from and using a range of tools and equipment competently.</p> <p>(Summer one for Northmoor)</p>	<p><u>Year 6</u></p> <p><u>Modelling – Anderson Shelters</u></p> <p>During this unit of work, the children design and make an Anderson shelter when they reach the point of 'Goodnight Mister Tom' where William builds an Anderson shelter himself/ when they learn more about the Blitz. They draw what their shelter might look like from given research; construct it using a range of media (wood/cardboard/tissue paper etc.); and then evaluate the strategies used to consider how the models could have been improved. This unit builds on previous DT work in Year 4, where the children created their own Aqueduct structure.</p> <p><u>Textiles - Weaving</u></p> <p>Building on the Tudor rose that the children sewed with a variety of stitches in Year 5, the children weave a tapas placement having been given a task brief from 'The Range' and having researched Argentine textiles and patterns. They use a paper plate as their loom, which is decorated in appropriate colours and patterns. This is then followed by some circular weaving in the centre of the plate. Finally, the product is evaluated, and the children consider how their products could have been improved..</p> <p><u>During the 'You're Hired!' topic,</u> The children practise their DT skills by exploring and developing enterprising ideas as well as investigating and making a variety of high-quality products with a range of tools. This is very much dependent on the ideas that the children <u>come up with</u> and will vary year on year.</p>
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