



Year Six

Learning Journey Plan

Term - Autumn 2

Curriculum Area - D&T - Anderson shelters (WW2)

	What will my pupils need to have learnt before?	What do I want my pupils to learn. Know that.. Know how.. NC	How will my pupils access that learning, what will we be doing? What will be the order of learning?	What are the authentic outcomes to be produced?	Vocabulary
	<p>To understand how to draw up a specification for their product. (Year 5)</p> <p>To demonstrate a secure knowledge about tools, techniques and equipment. (Year 5)</p> <p>To seek evaluation from others in order to make improvements to their own product. (Year 5)</p>	<p>To understand how to use detailed drawings to communicate ideas and model their ideas in a variety of ways.</p> <p>Use techniques, tools and equipment confidently in a variety of ways.</p> <p>To understand how to use tests to evaluate their product in order to make improvements and record these through drawings.</p> <p>Communicate their ideas through detailed labelled drawings and develop a design specification.</p> <p>Select appropriate tools, materials, components and techniques and use these to assemble components to make working models.</p> <p>Use tools safely and accurately and make modifications as they go along.</p> <p>Construct products using permanent joining techniques to achieve a quality product.</p> <p>Evaluate their products identifying strengths and areas for development, and carrying out appropriate tests.</p>	<ol style="list-style-type: none"> Children to understand what an Anderson shelter was and what its main purpose was. Go through powerpoint looking at the history of the Anderson Shelter. Discussing what they would have been made of and where they would have been put. Children to write an explanation of what an Anderson shelter is: what it was made of, what shape it was and why, where it was put, why was it covered, how were they cost effective? Model the reasoning for the curved roof—have two pieces of card: one curved and one flat. Drop tennis ball on top of both; the flat roof will collapse and fall onto the people underneath it and the curved shape is stronger. Recap of prior learning from last lesson—mini-quiz about Anderson Shelters covering what was covered last lesson. In this lesson children to create the strongest bridge possible using knowledge gained from last lesson—children to use ideas from the structures of the Anderson Shelter to support their creation of the bridge. Children to consider which materials are suitable to build their own Anderson Shelter and then test out the strength of different materials. Remind children that these shelters were made from recycled and easily accessible materials. Watch the two videos about Air raid shelters in the Blitz. Using the different materials available children use the material test sheet to investigate how suitable each material is for use. Children to make a hole in the material and use force meters to try and rip a section of the material open by dragging on the force-meter when it is hooked into the hole. Recap learning so far children to discuss which materials performed best in the previous lesson. Children to construct a small model of an Anderson Shelter—first activity: research Anderson Shelters and how they were made (ipads). Activity 2: children to construct their own model of an Anderson Shelter using the template provided. Looking at how tabs can be useful when joining different parts of a model together. children to draw a design of the Anderson Shelter which the children want to make for testing at the end of the unit. Explain that inventions or creations are always thought out on paper first where the designer draws pictures of what they wish to make. In their sketch books children draw and label the Anderson Shelter they are aiming to make. They must label each part detailing what material they are using where and why. Once this is done, children use the planning sheet to detail the elements and steps they will need to have and complete to build their shelter. Children to make a prototype of their shelter. Using recycled paper children should attempt to build a replica of the Anderson Shelter they have designed. After they have made this, they should write an evaluation of what they have learnt from making the replica that they will use to improve their real Shelter next lesson. Remind children that they will need to bring in their recycled resources for next lesson to create their Anderson Shelter. Children to build their design. Children will need a longer lesson for this activity (set aside a morning—potentially even a whole day). Children to create their structure using the recycled materials they have decided on—remind children that the idea is that their structure can withstand objects being dropped onto it. If the children finish this activity early they must decide on what they would take with them into their Anderson Shelter and justify their reasoning for these. At the end of the lesson, test out the durability of their structures. Children to evaluate their designs. Class discussion of their own successes and mistakes when making their Shelters. Remind children that all designers and inventors will make mistakes along the way and this will help them to learn and develop the best product. Children to complete the shelter evaluation sheet. What worked? What could have been better? What would you do differently next time? 	<p>Children to create an Anderson Shelter that can withstand an object being dropped onto it.</p>	<p>Evaluate</p> <p>Design</p> <p>Measuring</p> <p>Marking out</p> <p>Cutting</p> <p>Joining</p> <p>Finishing techniques</p> <p>Construction</p> <p>Structures</p> <p>Stability</p> <p>Equipment</p> <p>Specification</p> <p>Development</p> <p>Utensils</p> <p>Design brief</p> <p>Permanent</p> <p>Temporary</p> <p>Reinforce</p> <p>Annotated sketch</p> <p>Innovation</p> <p>Prototype</p> <p>traingulation</p>