

St Bernadette's Catholic Primary Voluntary Academy

Subject Medium Term Planning - LKS2 Advent Term Cycle A - Topic- Caveman to Iron Warrior



MATERIALS	Learning Objective	Activity	Key Knowledge (By the end of the lesson)		Vocabulary (Tier 3)
			Substantive (Knowledge)	Disciplinary (Skill)	
Lesson 1	L.O. 5 To be able to investigate a range of existing products.	<p>Recap knowledge from KS1 (Cycle A Famous Faces topic).</p> <p>-Children investigate, analyse and evaluate books and, where available, other products which have a range of lever and linkage mechanisms.</p> <p>-Explore different types of levers (e.g. fixed pivot and loose pivot) and linkages (e.g. reverse motion linkage, push pull linkage, parallel motion) using prepared teaching aids and label these in books.</p> <p>-Discuss key questions e.g. Who might it be for? What is its purpose? Etc</p>	<ul style="list-style-type: none"> Know what an existing product is and why it is important we evaluate them. Use the correct technical vocabulary for the projects they are undertaking. 	<ul style="list-style-type: none"> Investigate and analyse how well products have been designed and made. Investigate and analyse why materials have been chosen and begin to suggest reasons for this Investigate and analyse how well products work to achieve their purposes. 	Existing Products Lever Linkage Mechanism User Purpose
Lesson 2	L.O. 3 To be able to select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], with developing accuracy	<p>-Demonstrate the correct and accurate use of measuring, marking out, cutting, joining and finishing skills and techniques.</p> <p>-Practise making different types of levers (e.g. fixed pivot and loose pivot) and linkages (e.g. reverse motion linkage, push pull linkage, parallel motion) using prepared teaching aids to support.</p>	<ul style="list-style-type: none"> Know the steps of how to make at least 2 different levers/linkages. Use the correct technical vocabulary for the projects they are undertaking. 	<ul style="list-style-type: none"> Learn to use a range of tools and equipment safely, appropriately and accurately. Select and use a range of materials and components. With growing independence, measure and mark out to the nearest cm. 	Lever Linkage Fixed Pivot Loose Pivot Cut Measure Assemble

		<p>LA - Practice making side to side linkage. All - Focus on making Reverse Levers. HA - Attempt alternative lever with the aid of a help sheet.</p> <p>Stick pictures of their attempts in their book.</p>		<ul style="list-style-type: none"> • With help, cut and shape materials with some degree of accuracy. • Assemble, join and combine material and components with some degree of accuracy. 	
Lesson 3	<p>L.O. 1 To be able to use research and develop design criteria to begin to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups.</p> <p>L.O. 2 To be able to generate, develop, model and communicate their ideas through discussion, annotated sketches, pattern pieces and computer-aided design.</p>	<p>-Children to develop design criteria (must include sideways linkage from KS1 and reverse linkage from KS2) for their non fiction (short) information book about either bronze, iron or stone age.</p> <p>-Create design for their own product. -Use annotated sketched and cross sectional drawings. -Include colours of card, levers and linkages to be used in their final product.</p>	<ul style="list-style-type: none"> • Use their knowledge of a broad range of existing products to help generate their ideas . 	<ul style="list-style-type: none"> • Develop and follow simple design criteria. • Design innovative, functional and appealing products that are fit for purpose and aimed at a target market. • Use annotated sketches and cross-sectional drawings to develop and communicate their ideas. • Generate a range of design ideas and clearly communicate final designs. 	<p>Sideways linkage Reverse linkage Non fiction information book Design Criteria Annotated Sketches</p>
Lesson 4 Double lesson with lesson 5	<p>L.O. 3 To be able to select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], with developing accuracy.</p>	<p>-Begin to make the lever and linkages with chosen card for their final product by selecting and cutting their chosen materials ready.</p>	<ul style="list-style-type: none"> • Know what their design criteria is (previous lesson) and ensure they follow it. • Know the steps of how to make different levers and linkages chosen in their design. 	<ul style="list-style-type: none"> • With growing confidence, select from a range of tools and equipment. • Use a range of tools and equipment safely, appropriately and accurately. 	<p>Equipment Marking out Cut Shape Materials Lever Linkage</p>

				<ul style="list-style-type: none"> ● Select and use a range of materials and components. ● With growing independence, measure and mark out to the nearest cm. ● With help, cut and shape materials with some degree of accuracy. 	
<p>Lesson 5</p> <p>Double lesson with lesson 4</p>	<p>L.O. 4 To be able to select from and use a wider range of materials and components, including construction materials, textiles and ingredients, to begin to consider their functional properties and aesthetic qualities.</p>	<p>-Continue making their design with their chosen card and assembling, joining and combining materials to make their chosen types of lever/linkage.</p>	<ul style="list-style-type: none"> ● Understand the different types of patterns and the importance of colour. ● Explain how mechanical systems such as levers and linkages create movement and use mechanical systems in their products. 	<ul style="list-style-type: none"> ● With growing confidence, select from a range of tools and equipment. ● Use a range of tools and equipment safely, appropriately and accurately. ● Assemble, join and combine material and components with some degree of accuracy. ● Select and use different and appropriate finishing techniques to improve the appearance of a product ● Sketching and colouring skills when creating their pattern and design. 	<p>Finishing techniques</p> <p>Constructions Materials</p> <p>Lever</p> <p>Linkage</p> <p>Aesthetic Qualities</p> <p>Assemble</p> <p>Join</p> <p>Combine</p>

Lesson 6	L.O. 6 To be able to evaluate their ideas and products against their own design criteria and begin to consider the views of others to improve their work.	-To evaluate their lever and linkage story book using the design criteria developed in Lesson 3.	<ul style="list-style-type: none"> • Know what their design criteria was. • Know the importance of evaluating their final product. 	<ul style="list-style-type: none"> • Identify the strengths and areas for development in their products. • Consider the views of others, including intended users, to improve their work. • Use their design criteria to evaluate their completed products. 	Evaluate Design Criteria Assess User
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