



### Year 1 –Mechanisms – Sliders and Levers

#### Topic Overview – Lesson Objectives

<b>Lesson 1</b>	Investigate sliders and levers. Think about what you could make, based on simple design criteria and your own experiences. Demonstrate simple levers and sliders to the children. Use questions to develop children's understanding such as 'Which part of the mechanism is the pivot?'
<b>Lesson 2</b>	Discuss what could be made and develop ideas through drawings and mock-ups with card and paper.
<b>Lesson 3</b>	<b>Design</b> what to make and suggest what to do next. Consider such things as making sure the mechanism works smoothly and makes the right type of movement. <i>SJV – Design a slider or lever choosing an animal from Blackpool Zoo</i>
<b>Lesson 4</b>	<b>Make</b> your product by selecting and using tools, explaining choices, to cut shape and join paper and card.
<b>Lesson 5</b>	Finish making the product, using suitable finishing techniques suitable for the product being created.
<b>Lesson 6</b>	<b>Evaluate</b> your product by discussing how well it works in relation to the purpose and the user and whether it meets the design criteria.

#### Assessment – National Curriculum

NC Statement	Maths/Literacy opportunity	Child led enquiry
<p><b>Design</b></p> <ul style="list-style-type: none"> <li>*Design purposeful, functional, appealing products for themselves and other users based on design criteria.</li> <li>*Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups.</li> </ul> <p><b>Make</b></p> <ul style="list-style-type: none"> <li>*Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing].</li> <li>*Select from and use a wide range of materials and components according to their characteristic.</li> </ul> <p><b>Evaluate</b></p> <ul style="list-style-type: none"> <li>*Explore and evaluate a range of existing products.</li> <li>*Evaluate their ideas and products against design criteria.</li> </ul> <p><b>Technical knowledge</b></p> <ul style="list-style-type: none"> <li>*Explore and use mechanisms: sliders and levers.</li> </ul>	<p>Describe position, direction and movement.</p> <p>Use appropriate standard and non-standard measures.</p> <p><i>Traditional Tales</i> <i>Nursery Rhymes</i> <i>Books demonstrating sliders and levers</i> <i>Spoken language-Listen and respond appropriately to adults. Ask relevant questions to extend your knowledge and understanding. Build technical and directional vocabulary.</i></p>	<p>How will you make your product move?</p>

Topic  
Vocabulary

**slider, lever, pivot**, slot, bridge, guide, card, masking tape, paper fastener, join, pull, push, up, down, straight, curve, forwards, backwards, design, make, evaluate, user, purpose, ideas, design criteria, product, function  
(Tier 3 words in bold.)