



Portfields Primary School Medium Term Plan



Year Group – 1

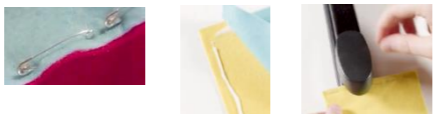

Subject - Design and Technology


Strand – Mechanisms


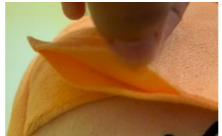

Topic – Moving Storybook

Term - Summer 1

National Curriculum	Key Questions		Substantive Knowledge	Key Vocabulary	Real-Life Links
<p>Design purposeful, functional, appealing products for themselves and other users based on design criteria.</p> <p>Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology.</p> <p>Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing].</p> <p>Evaluate their ideas and products against design criteria.</p> <p>Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.</p>	<p>What objects do you know that have moving parts? How do the parts move in the same direction? Would it be good to have the pictures in a book move? How can we make pictures in a book move? What moving books do you know? Do you prefer up-and-down or side-to-side sliders? Why? What will EYFS children want to see in a story book? What will the background of this page be? Why? What will the moving part of this page be? How does this contribute to the story? What feedback did you receive about your final product from the target market? What would you do differently next time?</p>		<p>Know that mechanisms are the parts of an object that move together.</p> <p>Understand the three distinct parts of a given story.</p> <p>Know that designs should be appropriate for the target market.</p> <p>Understand that the background and moving parts of the storybook need to complement each other and tell a story.</p>	<p>Background Design Down Feedback Lolly stick Mechanism Movement Side Up</p>	<p>Mechanisms in a playground: seesaw, roundabout, swings.</p> <p>A ball bouncing up and down.</p> <p>A bicycle or tricycle.</p> <p>The story of Humpty Dumpty.</p>
	Technical Questions			Technical Vocabulary	
	<p>What is a mechanism? <i>The parts of an object that move together.</i></p> <p>How can we make pictures in a book move? <i>Using an up and down or side to side slider.</i></p> <p>Why are we making slider handles from lolly sticks? <i>Lolly sticks are stiff so will not bend or get stuck inside the paper as they move.</i></p> <p>Why do we need slots? <i>Slots are slits/cuts in paper that a slider is threaded through. They keep a slider in place whilst still allowing up-and-down or side-to-side movement.</i></p>	<p>What is a target market? <i>The people a product is being made for.</i></p> <p>How can we tell a story without words? <i>By moving pictures on the ends of sliders.</i></p> <p>How do you know what the moving part on each page should be? <i>The moving part should be related to that part of the story and fit the background.</i></p>	<p style="text-align: center;">Disciplinary Knowledge</p> <p>Name some everyday objects that have mechanisms for movement.</p> <p>Make prototype up-and-down and side-to-side sliders to test movement using a picture on a lolly stick and slots in paper.</p> <p>Create a class design criteria based on the target market (EYFS children).</p> <p>Design a moving storybook using a planning template to plan the background, moving part and mechanism of each part.</p> <p>Make up-and-down and side-to-side sliders using lolly sticks.</p> <p>Cuts slits in folded paper to create slots for sliders.</p> <p>Create backgrounds and moving part designs that fit with the theme of the storybook.</p> <p>Present the final product to the target audience and receive feedback.</p>	<p>Design criteria Prototype Slider Slot Target market</p>	Inventors and Makers

Lesson 1			
Flashback Four		Learning Objectives	Star Knowledge
<p>Last Topic What are these methods of joining fabric called? <i>Pinning, gluing, stapling</i></p> 		<p><u>Learning Objective</u> LO to explore the movement of sliders.</p> <p><u>Success Criteria</u> I know that mechanisms are the parts of an object that move together. I can name some everyday objects that have mechanisms. I can make and test prototype sliders to test movement.</p>	<p><i>Kapow lesson 1</i> Mechanisms are the parts of an object that move together.</p>
<p>Last Year How can you test whether a material is waterproof? <i>Pour water over it</i></p>	<p>Art Name the three secondary colours. <i>Orange, green, violet/purple</i></p> 		

Lesson 2			
Flashback Four		Learning Objectives	Star Knowledge
<p>Last Lesson Which of these is not an example of a mechanism? <i>A bench because it does not have any moving parts.</i></p> 	<p>Last Topic Why do I need to leave a gap when joining 2 pieces of fabric to make a puppet? <i>Because there needs to be a big enough space for your hand to go inside.</i></p>	<p><u>Learning Objective</u> LO to design a moving storybook.</p> <p><u>Success Criteria</u> I can create a class design criteria to suit the target market. I can plan the background, moving part and mechanism of each page of my storybook.</p>	<p><i>Kapow lesson 2</i> A planning template can be used to organise ideas and designs before making.</p>
<p>Last Year How can you test whether an object will float or sink? <i>Place them in water</i></p>	<p>Art What is Pop Art? <i>Pop art is a type of art that uses bold and bright colours.</i></p>		

Lesson 3			
Flashback Four		Learning Objectives	Star Knowledge
<p>Last Lesson Should the background of this page of a moving storybook be a beach? <i>No, it should be related to the moving part.</i></p> 	<p>Last Topic What is the problem with using glue to join fabric in this example? <i>The glue has become unstuck and there are gaps between the fabric.</i></p> 	<p><u>Learning Objective</u> LO to make a moving storybook.</p> <p><u>Success Criteria</u> I can make moving parts that tell a story. I can present my final product to the target market. I can reflect on feedback about my final product.</p>	<p><i>Kapow lessons 3 & 4</i> It is important to get feedback from the target audience so you know what to do differently next time.</p>
<p>Last Year Which is the best boat to take lots of people on holiday? Why? <i>The ferry because it is bigger so more people can fit in it.</i></p> 	<p>Art Which paintbrush would you use to paint a large square? <i>The bigger paintbrush</i></p> 