

# YEAR 1

## MECHANISMS – MAKING A MOVING STORY BOOK

	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
DESIGNING	<p><b>The three Prime ELGS of Communication and Language, PSED and Physical Development provide the foundations of which all other learning is built upon.</b></p> <p><b>Specific:</b></p> <p><b>Creating with Materials ELG</b></p> <p>Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form, and function.</p> <p>Share their creations, explaining the process they have used.</p> <p><b>People Culture and Communities ELG</b></p> <p>Describe their immediate environment using knowledge from observation, discussion, stories,</p>	<p>Use own ideas to design something</p> <p>Describe how their own idea works</p> <p>Design a product which moves</p> <p>Explain to someone else how they want to make their product</p> <p>Make a simple plan before making</p>	<p>Think of an idea and plan what to do next</p> <p>Explain why they have chosen specific criteria</p>	<p>Prove that a design meets a set criteria</p> <p>Design a product and make sure that it looks attractive</p> <p>Choose a material for both its suitability and its appearance</p>	<p>Use ideas from other people when designing</p> <p>Produce a plan and explain it</p> <p>Persevere and adapt when original ideas do not work</p> <p>Communicate ideas in a range of ways, including by sketches and drawings which are annotated</p>	<p>Come up with a range of ideas after collecting information from different sources</p> <p>Produce a detailed step-by-step plan</p> <p>Explain how a product will appeal to a specific audience</p> <p>Design a product that requires pulleys or gears</p>	<p>Use market research to inform plans and ideas</p> <p>Follow and refine original plans</p> <p>Justify planning in a convincing way</p> <p>Show that culture and society is considered in plans and designs</p>

	non-fiction texts, and maps.						
MAKING	<p><b>The three Prime ELGS of Communication and Language, PSED and Physical Development provide the foundations of which all other learning is built upon.</b></p> <p><b>Specific:</b></p> <p><b>Creating with Materials ELG</b></p> <p>Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form, and function.</p> <p>Share their creations, explaining the process they have used.</p>	<p>Use own ideas to make something</p> <p>Make a product which moves</p> <p>Choose appropriate resources and tools</p>	<p>Choose tools and materials and explain why they have chosen them</p> <p>Join materials and components in different ways</p> <p>Measure materials to use in a model or structure</p>	<p>Follow a step-by-step plan, choosing the right equipment and materials</p> <p>Select the most appropriate tools and techniques for a given task</p> <p>Make a product which uses both electrical and mechanical components</p> <p>Work accurately to measure, make cuts and make holes</p>	<p>Know which tools to use for a particular task and show knowledge of handling the tool</p> <p>Know which material is likely to give the best outcome</p> <p>Measure accurately</p>	<p>Use a range of tools and equipment competently</p> <p>Make a prototype before making a final version</p> <p>Make a product that relies on pulleys or gears</p>	<p>Know which tool to use for a specific practical task</p> <p>Know how to use any tool correctly and safely</p> <p>Know what each tool is used for</p> <p>Explain why a specific tool is best for specific action</p>
EVALUATING	<p><b>The three Prime ELGS of Communication and Language, PSED and Physical Development provide the foundations of which all other learning is built upon.</b></p> <p><b>Specific:</b></p>	<p>Describe how something works</p> <p>Explain what works well and not so well in the model they have made</p>	<p>Explain what went well with their work</p>	<p>Explain how to improve a finished model</p> <p>Know why a model has or has not been successful</p>	<p>Evaluate and suggest improvements for designs</p> <p>Evaluate products for both their purpose and appearance</p> <p>Explain how the design has been improved</p>	<p>Suggest alternative plans; outlining the positive features and draw backs</p> <p>Evaluate appearance and function against original criteria</p>	<p>Know how to test and evaluate designed products</p> <p>Explain how products should be stored and give reasons</p> <p>Evaluate product against clear criteria</p>

	<p><b>Creating with Materials ELG</b></p> <p>Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form, and function.</p> <p>Share their creations, explaining the process they have used.</p>				<p>Use IT where appropriate to add to the quality of the product</p>		
<p>TECHNICAL KNOWLEDGE</p>		<p>Make their own model stronger Make a model stronger and more stable</p> <p>Use wheels and axles, when appropriate to do so</p>	<p>Know how to strengthen a product by stiffening a given part or reinforce a part of the structure</p> <p>Use a simple IT program within the design Know how to be hygienic and safe when using food</p> <p>Bring a creative element to the food product being designed</p>	<p>Link scientific knowledge to design by using pulleys or gears</p> <p>Use more complex IT program to help enhance the quality of the product produced Use electrical systems correctly and accurately to enhance a given product</p> <p>Know which IT product would enhance a specific product Use knowledge to improve a made product by strengthening, stiffening or reinforcing</p>			
<p>FOOD TECHNOLOGY</p>		<p>Cut food safely Weigh ingredients to use in a recipe</p> <p>Describe the ingredients used when making a dish or cake</p>	<p>Describe how food ingredients come together</p> <p>Weigh out ingredients and follow a given recipe to create a dish</p> <p>Talk about which food is healthy and which food is not Know when food is ready for harvesting Describe how food ingredients come together</p> <p>Weigh out ingredients and follow a given recipe to create a dish</p> <p>Talk about which food is healthy and which food is not</p> <p>Know when food is ready for harvesting</p>	<p>Be both hygienic and safe in the kitchen</p> <p>Know how to prepare a meal by collecting the ingredients in the first place</p> <p>Know which season various foods are available for harvesting Explain how food ingredients should be stored and give reasons</p> <p>Work within a budget to create a meal</p> <p>Understand the difference between a savoury dish and sweet dish.</p>			

**COMPOSITES**

Design, make and evaluate a moving card using a slider and a lever.

**COMPONENTS**

**ONLY LESSON 1 REQUIRED**

	1					End Point
	<p>What are existing products like?</p> <p>How do different mechanisms work?</p>					<p>Children will know how a slider can be used as mechanisms</p> <p>Children will create a slider as mechanisms</p>
<p><b>CONCEPTS</b></p> <p>Link to concept map</p>						Children will have used their understanding and knowledge sliders to create an example
	Technique					Children will have made a moving lever
	Critical Thinking					Children will evaluate their slider
<p><b>SKILLS</b></p>	<p>Make a product which moves</p> <p>Choose appropriate resources and tools</p> <p>Describe how something works</p> <p>Explain what works well and not so well in the model they have made</p> <p>Make their own model stronger</p>					<p>Children will know how a slider can be used as mechanisms</p> <p>Children will be able to use knowledge of mechanisms to create a moving image</p>

	Make a model stronger and more stable					
<b>KNOWLEDGE</b> <a href="#">Z:\Hubs\Science and DT\DT\2023-2024\KAPOW\YEAR 1\Moving Story Book LESSON 1 ONLY\Knowledge Organiser.pdf</a>	Begin to draw on their own experience to help and generate ideas and research.  Explore and use mechanisms e.g. Levers, sliders,					Children will create a slider mechanism
<b>LESSON LINK</b>	KAPOW – MECHANISMS – MAKING A MOVING STORYBOOK – LESSON 1 ONLY					
<b>PROGRESSIVE VOCABULARY</b>	mechanism  slider					Articulate and recognise subject specific vocabulary
<b>CURRICULUM EXPERIENCES</b>	Exploring a range of sliders					
<b>END POINT</b>	Children will explore creating mechanisms and sliders					