

# YEAR 6

## STRUCTURE - PLAYGROUNDS

	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</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>Suggest alternative plans; outlining the positive features and draw backs</p> <p>Evaluate appearance and</p>	<p>Know how to test and evaluate designed products</p> <p>Explain how products should be stored and give reasons</p>

	<p><b>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>Explain how the design has been improved</p> <p>Use IT where appropriate to add to the quality of the product</p>	<p>function against original criteria</p>	<p>Evaluate product against clear criteria</p>
<p>TECHNICAL KNOWLEDGE</p>		<p>Make their own model stronger</p> <p>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</p> <p>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</p> <p>Use electrical systems correctly and accurately to enhance a given product</p> <p>Know which IT product would enhance a specific product</p> <p>Use knowledge to improve a made product by strengthening, stiffening or reinforcing</p>	

FOOD TECHNOLOGY		<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>
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**COMPOSITES**

**STRUCTURE – PLAYGROUNDS**

Design, make and evaluate a playground

**COMPONENTS**

	1	2	3	4	5	End Point
	<p>What are the key features of a playground?</p> <p>Can I design a playground with a variety of structures?</p>	<p>How can I use previous knowledge when creating structures?</p> <p>How can I strengthen my structure?</p> <p>How can tools be used safely and appropriately?</p>	<p>How can I test my structure and improve it?</p> <p>What makes a successful structure?</p> <p>How can I make my structure aesthetically pleasing?</p>	<p>How can I add a base to my structure?</p> <p>How can I improve the landscape around my structure?</p>	<p>Use lesson time if necessary to complete tasks</p>	<p>Children will be able to choose appropriate materials and create a simple labelled diagram and clear instructions</p> <p>Children will be able to use tools safely and appropriately.</p> <p>Children will be able to create a reinforced structure</p> <p>Children will evaluate their design; suggest how they overcome</p>

						<b>challenges and consider improvements they can make.</b>
<b>CONCEPTS</b>  Link to concept map	Design			Design		Children will have used their understanding and knowledge of structures to design a playground
	Purpose		Purpose	Purpose		Children will have used their understanding and knowledge of structures to create design criteria.
	Influence and Impact			Influence and Impact		Children will have considered the placement of a playground in its environment
		Systems	Systems			Children will have joined materials correctly and appropriately.
		Technique	Technique	Technique		Children will have joined materials correctly and appropriately.
	Critical Thinking	Critical Thinking	Critical Thinking	Critical Thinking		Children will evaluate their design and reflect on peer feedback.
<b>SKILLS</b>	Use market research to inform plans and ideas  Follow and refine original plans  Justify planning in a convincing way  Show that culture and society is considered in plans and designs  Evaluate product against clear criteria	Follow and refine original plans  Justify planning in a convincing way  Know which tool to use for a specific practical task  Know how to use any tool correctly and safely  Know what each tool is used for  Know what each tool is used for  Explain why a specific tool is best for specific action  Evaluate product against clear criteria	Justify planning in a convincing way  Know which tool to use for a specific practical task  Know how to use any tool correctly and safely  Know what each tool is used for  Explain why a specific tool is best for specific action  Know how to test and evaluate designed products  Evaluate product against clear criteria	Use market research to inform plans and ideas  Follow and refine original plans  Show that culture and society is considered in plans and designs  Know which tool to use for a specific practical task  Know how to use any tool correctly and safely  Know how to test and evaluate designed products		Children will know how to use tools to carte and strengthen a structure.  Children will be able to design a playground following the correct criteria.  Children will use tools and materials appropriately to create, test and reinforce their structures.  Children will enhance their playground through appropriate decoration

		Use knowledge to improve a made product by strengthening, stiffening or reinforcing	Use knowledge to improve a made product by strengthening, stiffening or reinforcing	Evaluate product against clear criteria		
<b>KNOWLEDGE</b> <a href="#">Z:\Hubs\Science and DT\DT\2023-2024\KAPOW\YEAR 6\STRUCTURES - Playgrounds\Knowledge Organiser.pdf</a>	Draw on their previous knowledge and research skills of playground structures  Create design criteria  Design a playground with a variety of structures	Begin to create different structures to create a playground  Use different tools safely and appropriately	Testing structure for strength  Reinforcing structures	Use simple finishing techniques to improve the appearance of their product.		Children will be able to design a playground following the correct criteria.  Children will use tools and materials appropriately to create, test and reinforce their structures.  Children will enhance their playground through appropriate decoration
<b>LESSON LINK</b>	KAPOW - STRUCTURE - PLAYGROUNDS	KAPOW - STRUCTURE - PLAYGROUNDS	KAPOW - STRUCTURE - PLAYGROUNDS	KAPOW - STRUCTURE - PLAYGROUNDS		
<b>PROGRESSIVE VOCABULARY</b>	apparatus  design criteria  equipment  playground  landscape features	apparatus  design criteria  equipment  playground  cladding  landscape features	apparatus  design criteria  equipment  playground  cladding  landscape features	apparatus  design criteria  equipment  playground  cladding  landscape features		Articulate and recognise subject specific vocabulary
<b>CURRICULUM EXPERIENCES</b>	Possibility of visiting playgrounds or looking at the play equipment in the school	Children using different tools using create structures	Children using different tools using create structures	Children decorate their playgrounds.		

<b>END POINT</b>	Children will have designed a playground with a variety of structures.	Children will have begun to create their structures.	Children will continue, test and strengthen their structures.	Children will build, reinforced and decorated their playgrounds.		
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**BIRCHINGTON**



**CHURCH OF ENGLAND PRIMARY**