

Electrical Systems

		Reception – Bookmarks	
		Kapow Skills and Knowledge Progression	ELGs
Skills	Design	<ul style="list-style-type: none"> <li>• Discussing what a good design needs.</li> <li>• Designing a simple pattern with paper.</li> <li>• Designing a bookmark.</li> </ul>	<p>Expressive Arts and Design: Creating with Materials</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>Make use of props and materials when role-playing characters in narratives and stories.</p>
		<ul style="list-style-type: none"> <li>• Choosing from available materials.</li> </ul>	
		<ul style="list-style-type: none"> <li>• Developing fine motor/cutting skills with scissors.</li> <li>• Exploring fine motor/threading and weaving (Under, over technique) with a variety of materials.</li> <li>• Using a prepared needle and wool to practise threading.</li> </ul>	
	Evaluate	Reflecting on a finished product and comparing to their design	<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>Make use of props and materials when role-playing characters in narratives and stories.</p>
Knowledge	Knowledge	<p>To know that a design is a way of planning our idea before we start</p> <p>To know that threading is putting one material through an object</p>	<p>Expressive Arts and Design: Creating with Materials</p> <p>Safely use and explore a variety of materials, tools, and techniques, experimenting with color, design, texture, form, and function:</p> <p>Share their creations, explaining the process they have used: By recognizing the importance of design as a planning process, children can explain the</p>

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			steps they took in creating their artwork or project, including how they planned their ideas before starting.
			Share their creations, explaining the process they have used

Year 1 – Puppets			
Kapow Skills and Knowledge Progression			National Curriculum
Skills	Design	• Using a template to create a design for a puppet.	Generate, develop, model, and communicate their ideas through templates
	Make	Cutting fabric neatly with scissors.	Select from and use a range of tools and equipment to perform practical tasks
		Using joining methods to decorate a puppet.	Select from and use a range of tools and equipment to perform practical tasks
		Sequencing the steps taken during construction.	Generate, develop, model, and communicate their ideas through talking, drawing, templates, mock-ups, and, where appropriate, information and communication technology
Evaluate	Reflecting on a finished product, explaining likes and dislikes	Explore and evaluate a range of existing products	
Knowledge	Knowledge	To know that 'joining technique' means connecting two pieces of material together.	Explore and use mechanisms [for example, levers, sliders, wheels, and axles], in their products.  Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining, and finishing].

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			Select from and use a wide range of materials and components, including construction materials, textiles, and ingredients, according to their characteristics.
		To know that there are various temporary methods of joining fabric by using staples, glue, or pins.	Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining, and finishing].  Select from and use a wide range of materials and components, including construction materials, textiles, and ingredients, according to their characteristics.
		To understand that different techniques for joining materials can be used for different purposes.	Design purposeful, functional, appealing products for themselves and other users based on design criteria.  Generate, develop, model, and communicate their ideas through talking, drawing, templates, mock-ups, and, where appropriate, information and communication technology.
		To understand that a template (or fabric pattern) is used to cut out the same shape multiple times.	Generate, develop, model, and communicate their ideas through talking, drawing, templates, mock-ups, and, where appropriate, information and communication technology.
		To know that drawing a design idea is useful to see how an idea will look.	Generate, develop, model, and communicate their ideas through talking, drawing, templates, mock-ups, and, where appropriate, information and communication technology.

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		Year 6 – Waistcoats	
		Kapow Skills and Knowledge Progression	National Curriculum
Skills	Design	Designing a waistcoat in accordance with a specification linked to a set of design criteria.	<p>Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups.</p> <p>Generate, develop, model, and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces, and computer-aided design.</p>
		Annotating designs to explain their decisions.	<p>Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups.</p> <p>Generate, develop, model, and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces, and computer-aided design.</p> <p>Investigate and analyse a range of existing products.</p>

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			<p>Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.</p> <p>Understand how key events and individuals in design and technology have helped shape the world.</p>
Make	Using a template when cutting fabric to ensure they achieve the correct shape.	Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining, and finishing], accurately.	
	Using pins effectively to secure a template to fabric without creases or bulges.	Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining, and finishing], accurately.	
	Marking and cutting fabric accurately, in accordance with their design.	Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining, and finishing], accurately.	
	Sewing a strong running stitch, making small, neat stitches and following the edge.	Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining, and finishing], accurately.	
	Tying strong knots.	Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining, and finishing], accurately.	
	Decorating a waistcoat, attaching features (such as appliqué) using thread.	Select from and use a wider range of materials and components, including construction materials, textiles, and ingredients, according to their functional properties and aesthetic qualities.	
	Finishing the waistcoat with a secure fastening (such as buttons).	Select from and use a wider range of materials and components, including construction materials, textiles, and ingredients, according to their functional properties and aesthetic qualities.	
	Learning different decorative stitches.	Apply their understanding of how to strengthen, stiffen, and reinforce more complex structures.	
	Sewing accurately with evenly spaced, neat stitches.	Apply their understanding of how to strengthen, stiffen, and reinforce more complex structures.	
Evaluate	Reflecting on their work continually throughout the design, make and evaluate process	Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups.	

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			<p>Generate, develop, model, and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces, and computer-aided design.</p> <p>Select from and use a wider range of tools and equipment to perform practical tasks (e.g., cutting, shaping, joining, and finishing) accurately.</p> <p>Select from and use a wider range of materials and components, including construction materials, textiles, and ingredients, according to their functional properties and aesthetic qualities.</p> <p>Investigate and analyse a range of existing products.</p> <p>Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.</p> <p>Understand how key events and individuals in design and technology have helped shape the world.</p> <p>Apply their understanding of how to strengthen, stiffen, and reinforce more complex structures.</p> <p>Understand and use mechanical systems in their products (e.g., gears, pulleys, cams, levers, and linkages).</p> <p>Understand and use electrical systems in their products (e.g., series circuits incorporating switches, bulbs, buzzers, and motors).</p> <p>Apply their understanding of computing to program, monitor, and control their products.</p>
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Knowledge	Knowledge	To understand that it is important to design clothing with the client/target customer in mind.	Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups.  Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.
		To know that using a template (or clothing pattern) helps to accurately mark out a design on fabric.	Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces, and computer-aided design.  Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.
		To understand the importance of consistently sized stitches.	Evaluate: investigate and analyse a range of existing products.  Technical knowledge: apply their understanding of how to strengthen, stiffen and reinforce more complex structures.