

KS1- Textiles Templates and Joining (Stockings)

Substantive Knowledge		Disciplinary Knowledge	
What will pupils know?	Vocabulary	Techniques the pupils will learn and apply.	
<ul style="list-style-type: none"> <li>I understand how simple 3-D textile products are made, using a template to create two identical shapes.</li> <li>I understand how to join fabrics using different techniques e.g. running stitch, glue, over stitch, stapling.</li> <li>I can explain how finishing techniques could be used e.g. using painting, fabric crayons, stitching, sequins, buttons and ribbons.</li> <li>I know and can use technical vocabulary relevant to the project</li> </ul>	<p>Applique Design Embroider Evaluate Fray Mock-up Seam Sew Template</p>	<p>I can cut and join different fabrics with simple techniques. I can design a functional and appealing product for a chosen user and purpose based on simple design criteria. I can create a simple mock-up of my design. I can select from a range of tools and equipment to perform practical tasks such as marking out, cutting, joining and finishing. I can evaluate existing products by saying what I like about them and what I don't like. I can evaluate my final products against the original design criteria.</p>	
		Skills	
		Year 1	Year 2
		<p>I can <b>apply</b> my knowledge of different techniques to join materials. I can <b>describe</b> my product and <b>explain</b> who it is for. I can <b>select</b> from a range of tools and equipment. I can <b>evaluate</b> by making simple comments about what worked well and what I might do different next time.</p>	<p>I can <b>apply</b> my knowledge of different techniques to join materials and <b>explain</b> why I have chosen certain techniques. I can <b>identify</b> my chosen user and <b>justify</b> the design choices I have made. I can <b>select</b> from a range of materials and <b>explain</b> my choices. I can <b>evaluate</b> my design and <b>compare</b> my final product to the original design criteria.</p>
Prior Learning- What should they already know?			
<p>EYFS</p> <p><b>Children are taught to:</b></p> <ul style="list-style-type: none"> <li>Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.                             <ul style="list-style-type: none"> <li>Share their creations, explaining the process they have used.                                     <ul style="list-style-type: none"> <li>Use a range of small tools.</li> </ul> </li> </ul> </li> </ul>			

KS1- Mechanisms (Pop-up books)			
Substantive Knowledge		Disciplinary Knowledge	
What will pupils know?	Vocabulary	Techniques the pupils will learn and apply.	
<ul style="list-style-type: none"> <li>I can describe how sliders and levers work.</li> <li>I understand that different mechanisms produce different types of movement.</li> </ul>	Guide Bridge Mechanism Pivot Slider Slot	<ul style="list-style-type: none"> <li>I can generate ideas base on a simple design criteria.</li> <li>I can communicate my ideas through drawings and mock-ups with card and paper.</li> <li>I can select tools, explaining my choices, to cut, shape, and join paper and card.</li> <li>I can use simple finishing techniques.</li> </ul>	
		Skills	
		Year 1	Year 2
		I can <b>apply</b> my knowledge of different techniques to join materials. I can <b>describe</b> my product and <b>explain</b> who it is for. I can <b>select</b> from a range of tools and equipment. I can <b>evaluate</b> by making simple comments about what worked well and what I might do different next time.	I can <b>apply</b> my knowledge of different techniques to join materials and <b>explain</b> why I have chosen certain techniques. I can <b>identify</b> my chosen user and <b>justify</b> the design choices I have made. I can <b>select</b> from a range of materials and <b>explain</b> my choices. I can <b>evaluate</b> my design and <b>compare</b> my final product to the original design criteria.
Prior Learning- What should they already know?			
EYFS <b>Children are taught to:</b> <ul style="list-style-type: none"> <li>Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.               <ul style="list-style-type: none"> <li>Share their creations, explaining the process they have used.                   <ul style="list-style-type: none"> <li>Use a range of small tools.</li> </ul> </li> </ul> </li> </ul>			

LKS2 - Textiles (Pencil Cases)			
Substantive Knowledge		Disciplinary Knowledge	
What will pupils know?	Vocabulary	Techniques the pupils will learn and apply.	
<ul style="list-style-type: none"> <li>I know how to strengthen, stiffen and reinforce existing fabrics.</li> <li>I understand how to securely join two pieces of fabric together.</li> <li>I can explain what patterns and seam allowances are for.</li> <li>I know and can use key vocabulary relevant to the project.</li> <li>I can talk about key events/ individuals who have been influential in textile development.</li> </ul>	Applique Pattern/ Template Seam Seam Allowance Prototype Aesthetics Stiches	<ul style="list-style-type: none"> <li>I can think of a variety of ideas to create a product for a specific purpose and user.</li> <li>I can make annotated sketches, prototypes, final product sketches and pattern pieces.</li> <li>I can plan the main stages of making.</li> <li>I can use a range of appropriate tools with some accuracy to cut, join and finish my product.</li> <li>I can choose fabrics and fastening according to their functional characteristics.</li> <li>I can investigate a range of 3D textile products.</li> <li>I can compare my product against the original design criteria.</li> </ul>	
		Skills	
		Year 3	Year 4
		I can <b>generate</b> realistic ideas through discussion and design criteria for an appealing, functional product. I I can plan and <b>explain</b> the main stages of making. I can <b>select</b> and use a range of tools to cut, join and finish my product. I can <b>investigate</b> and <b>evaluate</b> a range of 3-D textile products. I can <b>compare</b> my product against the original design criteria.	I can <b>generate</b> realistic ideas through discussion and design criteria and then <b>select and explain</b> which idea would make the most appropriate for an appealing, functional product. I can plan, <b>sequence</b> and <b>explain</b> the main stages of making. I can <b>select</b> and use a range of tools to cut, join and finish my product, <b>justifying</b> which tools I have selected and why. I can <b>investigate</b> and <b>evaluate</b> a range of 3-D textile products. I can <b>compare</b> and <b>contrast</b> my product against the original design criteria.
Prior Learning- What should they already know?			
KS1 <b>Children are taught to:</b> <ul style="list-style-type: none"> <li>Join fabric in simple ways by gluing and stitching.</li> <li>Use simple patterns and templates for marking out.               <ul style="list-style-type: none"> <li>Evaluated a range of textile products.</li> </ul> </li> </ul>			

LKS2 – Electrical Systems (Micro:Bit Lights)

Substantive Knowledge		Disciplinary Knowledge	
What will pupils know?	Vocabulary	Techniques the pupils will learn and apply.	
<ul style="list-style-type: none"> <li>I can explain the main stages of making my product.</li> <li>I can explain how to connect a simple electrical component and a battery in a series circuit to achieve a functional outcome.</li> <li>I know how to use a Micro:bit controller to enhance my product.</li> </ul>	Program Microcontroller Light emitting diode (LED) System Output devices Input devices Process	<ul style="list-style-type: none"> <li>I can gather information about the users' needs and wants.</li> <li>I can develop design criteria to inform the design of the product.</li> <li>I can use annotated sketches, cross-sectionals and exploding diagrams to explain my ideas.</li> <li>I can select from and use tools and equipment to cut, shape, join and finish with some accuracy.</li> </ul>	
		Skills	
		Year 3	Year 4
		I can <b>generate</b> realistic ideas through discussion and design criteria for an appealing, functional product. I can plan and <b>explain</b> the main stages of making. I can <b>select</b> and an electrical component to enhance my product. I can <b>compare</b> my product against the original design criteria.	I can <b>generate</b> realistic ideas through discussion and design criteria and then <b>select and explain</b> which idea would make the most appropriate for an appealing, functional product. I can plan, <b>sequence</b> and <b>explain</b> the main stages of making. I can <b>select</b> and use a range of electrical components, <b>justifying</b> how this enhances my product. I can <b>compare</b> and <b>contrast</b> my product against the original design criteria.
Prior Learning- What should they already know?			
KS1 <b>Children are taught to:</b> <ul style="list-style-type: none"> <li>Constructed a simple series electrical circuit, using bulbs, batteries, switches and buzzers.</li> <li>Cut and joined a variety of construction materials, such as wood, card, plastic and reclaimed materials.</li> </ul>			

UKS2 – Electrical System (Crumble: Alarms)

Substantive Knowledge		Disciplinary Knowledge	
What will pupils know?	Vocabulary	Techniques the pupils will learn and apply.	
<ul style="list-style-type: none"> <li>I can understand and explain how I can use electrical systems in my products.</li> <li>I can use technical vocabulary to explain my learning.</li> </ul>	Closed switch Computer controlled input Input devices Normally closed Normally open Open switch Output devices	<ul style="list-style-type: none"> <li>I can plan my product with the available resources in mind.</li> <li>I can design and make a product, sharing my ideas through discussion, annotated sketches and pictorial representations.</li> <li>I can write step-by-step instructions which includes lists of tools, equipment, materials and components required.</li> <li>I can produce a reliable, functional alarm.</li> </ul>	
		Skills	
		Year 5	Year 6
		I can <b>plan</b> my product and <b>explain</b> the choices I have made. I can design and make a product, sharing and <b>explaining</b> my ideas through discussion, annotated sketches and pictorial representations. I can <b>describe</b> the process for making through producing step-by- step instructions and lists of tools, equipment and materials. I can <b>apply</b> my knowledge of electrical systems to product an alarm.	I can <b>plan</b> my product and <b>justify</b> the choices I have made. I can design and make a product, sharing and <b>explaining</b> my ideas through discussion, annotated sketches and pictorial representations. I can <b>describe</b> and <b>sequence</b> the process for making through producing step-by- step instructions and lists of tools, equipment and materials. I can <b>apply</b> my knowledge of electrical systems to product an alarm, <b>summarizing</b> the steps I have taken.
Prior Learning- What should they already know?			
LKS2 <b>Children are taught to:</b> <ul style="list-style-type: none"> <li>Understand how electrical systems can be used to make products.</li> <li>Select electrical components needed to make a light product.                             <ul style="list-style-type: none"> <li>Evaluate existing electrical products.</li> </ul> </li> </ul>			

UKS2 - Textiles (Bags)			
Substantive Knowledge		Disciplinary Knowledge	
What will pupils know?	Vocabulary	Techniques the pupils will learn and apply.	
<ul style="list-style-type: none"> <li>I understand that a 3-D textile product can be made from a combination of pattern pieces, fabric shapes and different fabrics.</li> <li>I know that fabrics can be strengthened, stiffened and reinforced where appropriate.</li> </ul>	Seam Seam allowance Reinforce Hem Template Pattern pieces  Pins Needles Threads Pinking shears Fastenings  Annotate Design decisions Functionality Evaluate Mock up Pro-type	<ul style="list-style-type: none"> <li>I can make a detailed list of equipment and fabrics relevant to my task</li> <li>I can formulate step-by-step plans and, if appropriate, allocate tasks within a team</li> <li>I can select from and use a range of tools and equipment to make products that are accurately assembled and well finished.</li> <li>I can work within the constraints of time, resources and cost.</li> <li>I can test products with intended user and critically evaluate the quality of the design, manufacture, functionality and fitness for purpose.</li> </ul>	
		Skills	
		Year 5	Year 6
		I can <b>generate</b> realistic ideas through discussion and design criteria for an appealing, functional product. I can <b>plan</b> and <b>sequence</b> the main stages of making. I can <b>select</b> and use a range of tools to cut, join and finish my product. I can <b>investigate</b> and <b>discuss</b> a range of 3-D textile products. I can <b>compare</b> my product against the original design criteria.	I can <b>generate</b> realistic ideas through discussion and design criteria and then <b>select and explain</b> which idea would make the most appropriate for an appealing, functional product. I can plan, <b>sequence</b> and <b>explain</b> the main stages of making. I can <b>select</b> and use a range of tools to cut, join and finish my product, <b>justifying</b> which tools I have selected and why. I can <b>investigate</b> and <b>evaluate</b> a range of 3-D textile products. I can <b>compare</b> my product against the original design criteria and <b>explain</b> how it meets the brief.
Prior Learning- What should they already know?			
LKS2 <b>Children are taught to:</b> <ul style="list-style-type: none"> <li>Experience of basic stitching, joining textiles and finishing techniques.</li> <li>Experience of making and using simple pattern pieces.</li> </ul>			