



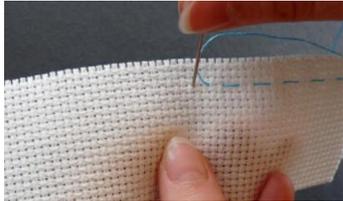
## Year 1 Design and Technology – Autumn

### Structures – Packed Lunch Boxes

Previous Knowledge and Skills	Key Vocabulary	
EYFS: <ul style="list-style-type: none"> <li>Looked at different materials</li> </ul>	Structure Material Stable Frame Strengthen Evaluate	Free-standing Base Layering Solid Design
Key Learning		
<ul style="list-style-type: none"> <li>To evaluate a product's ability to do a job well</li> <li>To investigate and evaluate existing products</li> <li>To explore different materials and decide which will be useful for making my product</li> <li>To design a new product that meets design criteria</li> <li>To select and use tools and equipment to make a product</li> <li>To test a product and evaluate</li> </ul>		
Key knowledge and skills (the 'stuff' we want you to remember)		
Skills - Design	Skills - Make	
<ul style="list-style-type: none"> <li>Learn about a design criteria and the importance of one</li> <li>Design a lunchbox to can meet the design criteria</li> </ul>	<ul style="list-style-type: none"> <li>Make a stable structure</li> <li>Follow instructions to cut and assemble</li> </ul>	
Skills - Evaluate	Images	
<ul style="list-style-type: none"> <li>Evaluate own work and make improvements</li> <li>Retesting and evaluating it</li> </ul>		
Focus Question – What materials will make a lunch box strong?		

# Year 2 Design and Technology – Autumn

## Textiles – Puppets

Previous Knowledge and Skills	Key Vocabulary	
<p>EYFS:</p> <ul style="list-style-type: none"> <li>Safely use and explore a variety of materials, tools and techniques.</li> <li>Experiment with colour, design, texture, form and function.</li> </ul>	<p>Accurate</p> <p>Fabric</p> <p>Knot</p> <p>Pattern</p> <p>Template</p>	<p>Needle</p> <p>Join</p> <p>Running Stitch</p>
Key Learning		
<ul style="list-style-type: none"> <li>To investigate a range of puppets and their features</li> <li>To develop and practice sewing skills</li> <li>To be able to work with fabric to create finger puppets</li> <li>To be able to design a glove puppet</li> <li>To be able to follow a design to make a puppet</li> <li>To be able to evaluate a finished product</li> </ul>		
Key knowledge and skills (the 'stuff' we want you to remember)		
Skills - Design	Skills - Make	
<ul style="list-style-type: none"> <li>Designing a puppet</li> </ul>	<ul style="list-style-type: none"> <li>Selecting and cutting fabrics for sewing</li> <li>Decorating a puppet using fabric glue or running stitch</li> <li>Threading a needle</li> <li>Sewing a running stitch, with evenly spaced, neat and even stitches to join fabrics</li> </ul>	
Skills - Evaluate	Images	
<ul style="list-style-type: none"> <li>Evaluate the quality of the stitching on others' work</li> <li>Discuss as class, the success of their stitching against the success criteria</li> <li>Identify aspects of their peers' work that they particularly like and why</li> </ul>		
Focus Question – How are puppets and fabric toys made?		

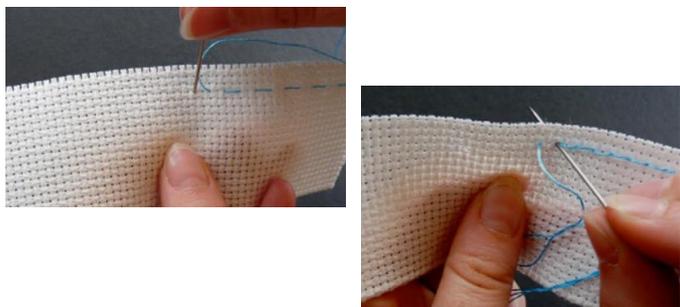
# Year 3 Design and Technology – Autumn

## Structures – Picture Frames

Previous Knowledge and Skills	Key Vocabulary	
Year 1: <ul style="list-style-type: none"> <li>• Pupil explore stability strength and stiffness when designing a lunchbox in Year 1</li> <li>• They learnt structure is made up of more than one part</li> </ul>	Structure Material Stable Frame Strengthen Evaluate	Free-standing Base Layering Solid Design
Key Learning		
<ul style="list-style-type: none"> <li>• To understand the wide and flat based objects are more stable</li> <li>• To understand the importance of strength and stiffness in structures</li> <li>• To know features of a photo frame</li> <li>• To know that a façade is the front of a structure</li> <li>• To understand that a frame needed to be strong and stable to withstand home life.</li> <li>• To know that a design specification is a list of success criteria for a product.</li> </ul>		
Key knowledge and skills (the 'stuff' we want you to remember)		
Skills - Design	Skills - Make	
<ul style="list-style-type: none"> <li>• Design a photo frame with key features to appeal to a specific person or purpose.</li> <li>• Drawing and labelling a photo frame design</li> </ul>	<ul style="list-style-type: none"> <li>• Construct a range of 3D shapes using nets</li> <li>• Create special features for individual designs</li> <li>• Make facades from a arrange of recycled materials</li> </ul>	
Skills - Evaluate	Images	
<ul style="list-style-type: none"> <li>• Evaluate own work and the work of others based on the aesthetics and in comparison, to the original design.</li> <li>• Suggest points for modification of the individual designs.</li> </ul>	 	
Focus Question – How can I make a strong and sturdy photography frame?		

# Year 4 Design and Technology – Autumn

## Textiles – Money Containers

Previous Knowledge and Skills		Key Vocabulary	
Year 2: <ul style="list-style-type: none"> <li>Design a functional and appealing product using a given set of design criteria</li> <li>Generate design ideas through drawing and labelling</li> <li>Join fabrics using a running stitch</li> <li>Evaluate against a set of design criteria and suggest a range of improvements.</li> </ul>		Textiles	Needle
		Fabric	Join
		Knot	Running Stitch
		Pattern	Back Stitch
		Template	Sew
		Pinning	Seam
Key Learning			
<ul style="list-style-type: none"> <li>To explore a range of money containers and examine their features</li> <li>To learn how to sew a different range of stitches</li> <li>To gather ideas for designing a money container</li> <li>To be able to design a money container</li> <li>To be able to make a money container using textiles</li> <li>To be able to evaluate a finished product</li> </ul>			
Key knowledge and skills (the 'stuff' we want you to remember)			
Skills - Design		Skills - Make	
<ul style="list-style-type: none"> <li>Write a design criteria for a product as a class</li> <li>Design a personalised money container</li> </ul>		<ul style="list-style-type: none"> <li>Make and test a paper template</li> <li>Threading a needle</li> <li>Sewing a running stitch and back stitch, working neatly by sewing small, straight stitches</li> <li>Incorporate a fastening to a design</li> </ul>	
Skills - Evaluate		Images	
<ul style="list-style-type: none"> <li>Test and evaluate an end product against the design criteria</li> <li>Suggest modification for improvements</li> <li>Articulate the advantages and disadvantages of different fastenings.</li> </ul>			
Focus Question – What makes an effective purse or wallet?			

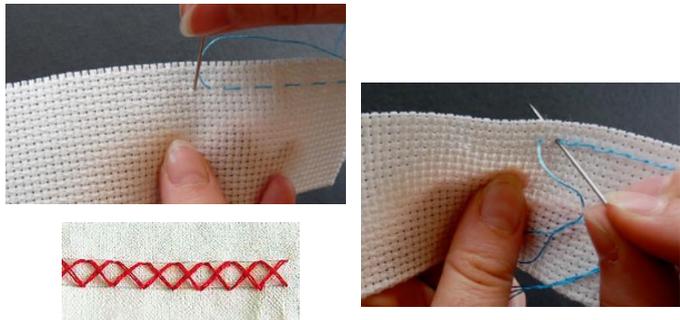
# Year 5 Design and Technology – Autumn

## Structures – Bridges

Previous Knowledge and Skills	Key Vocabulary	
<p>Year 3:</p> <ul style="list-style-type: none"> <li>• Tested strength of materials to create a structure</li> <li>• Begin to create their own design criteria.</li> <li>• Make a design by assembling the parts in order.</li> <li>• Evaluate the success of a product for performance and appearance</li> <li>• To know how to use tools safely.</li> </ul>	Structure Material Stable Components Strengthen	Plan Design Evaluate Solid
Key Learning		
<ul style="list-style-type: none"> <li>• To investigate free standing structures and apply their understanding of structures</li> <li>• To use a wide range of tool and equipment to preform practical tasks accurately</li> <li>• To develop a range of practical skills to create bends</li> <li>• To investigate free standing structures</li> <li>• To select from and use materials and components to make a marble run</li> <li>• I can evaluate and improve my design and technology work</li> </ul>		
Key knowledge and skills (the 'stuff' we want you to remember)		
Skills - Design	Skills - Make	
<ul style="list-style-type: none"> <li>• Design a marble run with key features to appeal to a specific purpose.</li> </ul>	<ul style="list-style-type: none"> <li>• Test a range of joining techniques to create a stable structure</li> <li>• Test different components to create a stable structure</li> </ul>	
Skills - Evaluate	Images	
<ul style="list-style-type: none"> <li>• Evaluate own work against the success criteria.</li> <li>• Evaluate the work of others</li> <li>• Suggest points for modification of the individual designs</li> </ul>		
Focus Question – What types of bridges hold the greatest load?		

# Year 6 Design and Technology – Autumn

## Textiles – Phone Cases

Previous Knowledge and Skills	Key Vocabulary	
Year 4: <ul style="list-style-type: none"> <li>• Design a functional and appealing product</li> <li>• Generate design ideas through drawing and labelling</li> <li>• Join fabrics using a running stitch and back stitch</li> <li>• Evaluate against a set of design criteria and suggest a range of improvements.</li> </ul>	Textiles Fabric Functionality Pattern Template Aesthetics	Needle Join Running Stitch Back Stitch Cross Stitch Embroidery
Key Learning		
<ul style="list-style-type: none"> <li>• To write a design criteria for a mobile phone case</li> <li>• To generate a range of design ideas and clearly communicate their final design</li> <li>• To make an accurate paper template</li> <li>• To practise different stitch types and choose the best to make a mobile phone case with</li> <li>• To create a step by step plan to create their own mobile phone case</li> <li>• To create their own phone case and evaluate</li> </ul>		
Key knowledge and skills (the 'stuff' we want you to remember)		
Skills - Design	Skills - Make	
<ul style="list-style-type: none"> <li>• Write a design criteria for a product, articulating decisions made</li> <li>• Design a personalised phone case</li> </ul>	<ul style="list-style-type: none"> <li>• Make and test a paper template with accuracy and keep in mind the design criteria</li> <li>• Sewing a running stitch, back stitch and cross stitch working neatly by sewing small, straight stitches</li> <li>• Incorporate a fastening to a design</li> </ul>	
Skills - Evaluate	Images	
<ul style="list-style-type: none"> <li>• Test and evaluate an end product against the design criteria</li> <li>• Suggest modification for improvements</li> <li>• Articulate the advantages and disadvantages of different fastenings</li> </ul>		
Focus Question – How can I tailor my design to suit my target audience?		