



# Design and Technology – Year 6 – Medium Term Plan

## Autumn Term, Structures: Playgrounds



Where before:					
Where next:	Textiles: Bags				
Outcome	Key Skills	Key Facts	Key Vocabulary	Learning Objectives	Educational visits/ Visitors
	<p><b><u>Design</u></b> -Designing a playground featuring a variety of different structures, giving careful consideration to how the structures will be used, considering effective and ineffective designs.</p> <p><b><u>Make</u></b> - Building a range of play apparatus structures drawing upon new and prior knowledge of structures.</p> <p>- Measuring, marking and cutting wood to create a range of structures.</p> <p>-Using a range of materials to reinforce and add decoration to structures.</p> <p><b><u>Evaluate</u></b> - Improving a design plan based on peer evaluation.</p> <p>- Testing and adapting a design to improve it as it is developed. • Identifying what makes a successful structure.</p>	<p>-To know that structures can be strengthened by manipulating materials and shapes. To understand what a 'footprint plan' is.</p> <p>-To understand that in the real world, design , can impact users in positive and negative ways.</p> <p>-To know that a prototype is a cheap model to test a design idea.</p>	<p>apparatus cladding design criteria equipment landscape features playground</p>	<p>To design a playground with a variety of structures</p> <p>To build a range of structures</p> <p>To improve and add detail to structures</p> <p>To create a surrounding landscape</p>	



# Design and Technology – Year 6 – Medium Term Plan

## Spring Term, Textiles: Bags



Where before:	Structures: Playgrounds				
Where next:	Mechanical systems: Automata toys				
Outcome	Key Skills	Key Facts	Key Vocabulary	Learning Objectives	Educational visits/ Visitors
	<p><b><u>Design</u></b> - Beginning to use more complex annotated sketches, such as cross-sectional and exploded diagrams and pattern pieces in design.</p> <p><b><u>Make</u></b> - Using a ruler to accurately measure and draw lines and marks.</p> <p>-Using nets to create 3D objects.</p> <p>-Using a combination of joining techniques to ensure strong joins (for example, using safety pins to hold fabric in place while a running stitch is sewn).</p> <p><b><u>Evaluate</u></b> -Reflecting on the usability, aesthetics, innovation and sustainability of products and discussing how design choices impact these aspects.</p>	<p>-Using pins effectively to secure a template to fabric without creases or bulges.</p> <p>-Tying knots at the end of thread to secure it.</p> <p>-Attaching objects like buttons using thread.</p> <p>-To know how designers use pattern pieces when creating textile products.</p> <p>-To know how nets can be folded to create 3D shapes.</p> <p>-To know safety pins can hold fabric in place before sewing.</p> <p>-To know consistently sized stitches improve the aesthetic of a product.</p> <p>-To know the shape of a product can affect both its aesthetics and function.</p> <p>-To know aesthetics is how something looks.</p> <p>-To know complete products are sometimes made in parts that are sewn together.</p>	<p>innovative pattern piece seam allowance</p>	<p>To explore how pattern pieces are used to design and make fabric</p> <p>To use pattern piece templates to shape, cut and stitch fabric</p> <p>To design a bag and create the prototype pattern pieces</p> <p>To create a prototypes bag from a design sketch</p> <p>To add features to a bag</p>	



# Design and Technology – Year 6 – Medium Term Plan

## Summer Term, Mechanical systems: Automata toys



Where before:	Textiles: Bags				
Where next:					
Outcome	Key Skills	Key Facts	Key Vocabulary	Learning Objectives	Educational visits/ Visitors
	<p><b><u>Design</u></b> -Beginning to use more complex annotated sketches, such as cross-sectional and exploded diagrams and pattern pieces in design.</p> <p><b><u>Make</u></b> -Using a ruler to accurately measure and draw lines and marks.  -Using nets to create 3D objects.  -Using a combination of joining techniques to ensure strong joins (for example, using safety pins to hold fabric in place while a running stitch is sewn).</p> <p><b><u>Evaluate</u></b> -Reflecting on the usability, aesthetics, innovation and sustainability of products and discussing how design choices impact these aspects.</p>	<ul style="list-style-type: none"> <li>- To know how designers use pattern pieces when creating textile products. To know how nets can be folded to create 3D shapes.</li> <li>- To know safety pins can hold fabric in place before sewing.</li> <li>- To know consistently sized stitches, improve the aesthetic of a product.</li> <li>- To know the shape of a product can affect both its aesthetics and function.</li> <li>- To know aesthetics is how something looks.</li> <li>- To know complete products are sometimes made in parts that are sewn together.</li> </ul>	accurate automata axle bench hook cam cam profile component cross-sectional diagram diagram dowel evaluate exploded diagram follower form frame function housing mechanism storefront visual	<p>To create design criteria to meet a user's needs.</p> <p>To use an exploded diagram to assemble a frame</p> <p>To explore a mechanism to inform a design decision</p> <p>To evaluate a completed design</p>	