

Class: Year 2

Unit		
<p>Aut 1/2 Unit title: Mechanisms – Making a Moving Monster</p>	<p><u>National Curriculum coverage</u></p> <ul style="list-style-type: none"> - Identify the correct terms for levers, linkages and pivots - Analyse popular toys with the correct terminology - Create functional linkages that produce the desired input and output motions - Design monsters suitable for children, which satisfy most of the design criteria - Evaluate their two designs against the design criteria, using this information and the feedback of their peers to choose their best design - Select and assemble materials to create their planned monster feature - Assemble the monster to their linkages without affecting their functionality 	<p><u>Key designing skills</u></p> <ul style="list-style-type: none"> - Creating a design criteria for a moving monster as a class - Designing a moving monster for a specific audience in accordance with a design criteria - Making linkages using card for levers and split pins for pivots - Experimenting with linkages adjusting the widths, lengths and thicknesses of card use - Cutting and assembling components neatly - Evaluating own designs against design criteria - Using peer feedback to modify a final design
<p>Spr 1/2 Unit title: Textiles - Pouches</p>	<p><u>National Curriculum coverage</u></p> <ul style="list-style-type: none"> - Sew a running stitch with regular-sized stitches and understand that both ends must be knotted - Prepare and cut fabric to make a pouch from a template - Use a running stitch to join the two pieces of fabric together - Decorate their pouch using the materials provided 	<p><u>Key designing skills</u></p> <ul style="list-style-type: none"> - Designing a pouch - Selecting and cutting fabrics for sewing - Decorating a pouch using fabric glue or running stitch - Threading a needle - Sewing running stitch, with evenly spaced, neat, even stitches to join fabric - Neatly pinning and cutting fabric using a template. - Troubleshooting scenarios posed by teacher - Evaluating the quality of the stitching on others' work - Discussing as a class, the success of their stitching against the success criteria - Identifying aspects of their peers' work that they particularly like and why
<p>Sum 1/2 Unit title: Mechanisms – Fairground wheels</p>	<p><u>National Curriculum coverage</u></p> <ul style="list-style-type: none"> - Describe how axles help wheels move a vehicle and design and label a working fairground wheel - Evaluate different designs - Describe the properties of different materials and select appropriate materials for the wheel - Build a stable structure, test elements of the design and adapt the design as necessary - Make the wheel rotate, evaluate a wheel mechanism and adapt it as necessary - Recall that a survey is used to find out what people like, tally results and use the results to inform the design - Add pods for the correct number of people and ensure that the pods stay upright when rotating around a fixed point - Explain the decisions for the pod design 	<p><u>Key designing skills</u></p> <p><u>Design</u></p> <ul style="list-style-type: none"> - Conducting simple surveys or discussions to gather opinions - Using a simple design brief that outlines the intended use, target user, and key features of the product, to create simple design criteria - Referring to specific parts of existing products when generating ideas - Knowing that drawings can help explain how something works <p><u>Make</u></p> <ul style="list-style-type: none"> - Choosing and explaining choice of materials, ingredients or components from a wider range of materials, ingredients or components - Following and recalling simple safety instructions - Choosing known geometric shapes when making - Considering balance in their finishing, like evenly spaced decoration <p><u>Evaluate</u></p> <ul style="list-style-type: none"> - Evaluating existing products against design criteria - Evaluating their ideas and creations against simple design criteria - Suggesting improvements to their peers' designs and products