



Year 3

	Key Skills	Key Knowledge	Key Vocabulary
<p>Autumn 2</p> <p>Textiles: Cushions</p>	<ul style="list-style-type: none"> • Designing and making a template from an existing cushion and applying individual design criteria • Following design criteria to create a cushion. • Selecting and cutting fabrics with ease using fabric scissors. • Threading needles with greater independence. • Tying knots with greater independence. • Sewing cross stitch to join fabric. • Decorating fabric using appliqué. • Completing design ideas with stuffing and sewing the edges. • Evaluating an end product and thinking of other ways in which to create similar items. 	<ul style="list-style-type: none"> • To know that appliqué is a way of mending or decorating a textile by applying smaller pieces of fabric. • To know that when two edges of fabric have been joined together it is called a seam. • To know that it is important to leave space on the fabric for the seam. • To understand that some products are turned inside out after sewing so the stitching is hidden. 	<ul style="list-style-type: none"> • appliqué • cross-stitch • design • equipment • fabric • patch • running stitch • thread • seam • texture • knot

Spring 2

Mechanisms: Pneumatic Toys

- Designing a toy that uses a pneumatic system.
- Developing design criteria from a design brief.
- Generating ideas using thumbnail sketches and exploded diagrams.
- Learning that different types of drawings are used in design to explain ideas clearly.
- Creating a pneumatic system to create a desired motion.
- Building secure housing for a pneumatic system
- Using syringes and balloons to create different types of pneumatic systems to make a functional and appealing pneumatic toy.
- Selecting materials due to their functional and aesthetic characteristics.
- Manipulating materials to create different effects by cutting, creasing, folding and weaving.
- Using the views of others to improve designs.

- To understand how pneumatic systems work.
- To understand that pneumatic systems can be used as part of a mechanism.
- To know that pneumatic systems operate by drawing in, releasing and compressing air.

- mechanism
- lever
- pivot
- linkage system
- pneumatic system
- input
- output
- component
- thumbnail sketch
- research
- adapt
- properties
- reinforce
- motion

	<ul style="list-style-type: none"> • Testing and modifying the outcome, suggesting improvements. • Understanding the purpose of exploded-diagrams through the eyes of a designer and their client. 		
<p>Summer 2</p> <p>Digital World: Electronic Charm</p>	<ul style="list-style-type: none"> • Developing design ideas for a technology pouch. • Drawing and manipulating 2D shapes, using computer-aided design, to produce a point of sale badge. • Using a template when cutting and assembling the pouch. • Following a list of design requirements. • Selecting and using the appropriate tools and equipment for cutting, joining, shaping and decorating a foam pouch. • Applying functional features such as using foam to create soft buttons. • Analysing and evaluating an existing product. 	<ul style="list-style-type: none"> • To understand that in programming a 'loop' is code that repeats something again and again until stopped. • To know that a Micro:bit is a pocket-sized, codeable computer. • Writing a program to control (button press) and/or monitor (sense light) that will initiate a flashing LED algorithm. 	<ul style="list-style-type: none"> • smart wearables • product design • digital revolution • technology • analogue • digital • feature • function • digital world • Micro:bit • electronic products • program • loops • initiate • simulator • control • monitor • sense • template • develop • fasten • test • user

	<ul style="list-style-type: none"> Identifying the key features of a pouch. 		<ul style="list-style-type: none"> CAD (computer-aided design) point of sale display badge stand
<p>Health Week</p> <p>Eating seasonally</p>	<ul style="list-style-type: none"> Creating a healthy and nutritious recipe for a savoury tart using seasonal ingredients, considering the taste, texture, smell and appearance of the dish. Knowing how to prepare themselves and a workspace to cook safely in, learning the basic rules to avoid food contamination. Following the instructions within a recipe. Establishing and using design criteria to help test and review dishes. Describing the benefits of seasonal fruits and vegetables and the impact on the environment. Suggesting points for improvement when making a seasonal tart. 	<ul style="list-style-type: none"> To know that not all fruits and vegetables can be grown in the UK. To know that climate affects food growth. To know that vegetables and fruit grow in certain seasons. To know that cooking instructions are known as a 'recipe'. To know that imported food is food that has been brought into the country. 	<ul style="list-style-type: none"> Climate Imported Natural Reared Seasonal Diet Ingredients Processed Recipe Seasons sugar

--	--	--	--