



Year 5

	Key Skills	Key Knowledge	Key Vocabulary
<p>Autumn 2</p> <p>Textiles: Stuffed Toys</p>	<ul style="list-style-type: none"> Designing a stuffed toy considering the main component shapes required and creating an appropriate template. Considering the proportions of individual components. Creating a 3D stuffed toy from a 2D design. Measuring, marking and cutting fabric accurately and independently. Creating strong and secure blanket stitches when joining fabric. Threading needles independently. Using appliqué to attach pieces of fabric decoration. Sewing blanket stitch to join fabric. Applying blanket stitch so the spaces between the 	<ul style="list-style-type: none"> To know that blanket stitch is useful to reinforce the edges of a fabric material or join two pieces of fabric. To understand that it is easier to finish simpler designs to a high standard. To know that soft toys are often made by creating appendages separately and then attaching them to the main body. To know that small, neat stitches which are pulled taut are important to ensure that the soft toy is strong and holds the stuffing securely. 	<ul style="list-style-type: none"> accurate annotate appendage blanket-stitch design criteria detail evaluation fabric sew shape stuffed toy stuffing template

	<p>stitches are even and regular.</p> <ul style="list-style-type: none"> • Testing and evaluating an end product and giving points for further improvements. 		
<p>Spring 2</p> <p>Mechanisms: Pop-Up Books</p>	<ul style="list-style-type: none"> • Designing a pop-up book which uses a mixture of structures and mechanisms. • Naming each mechanism, input and output accurately. • Storyboarding ideas for a book. • Following a design brief to make a pop up book, neatly and with focus on accuracy. • Making mechanisms and/or structures using sliders, pivots and folds to produce movement. • Using layers and spacers to hide the workings of mechanical parts for an aesthetically pleasing result. • Evaluating the work of others and receiving feedback on own work. 	<ul style="list-style-type: none"> • To know that mechanisms control movement. • To understand that mechanisms can be used to change one kind of motion into another. • To understand how to use sliders, pivots and folds to create paper-based mechanisms. • To know that a design brief is a description of what I am going to design and make. • To know that designers often want to hide mechanisms to make a product more aesthetically pleasing. 	<ul style="list-style-type: none"> • design • input • motion • mechanism • criteria • research • reinforce • model

	<ul style="list-style-type: none"> Suggesting points for improvement. 		
<p>Summer 2</p> <p>Digital World: Monitoring Devices</p>	<ul style="list-style-type: none"> Researching (books, internet) for a particular animal's needs. Developing design criteria based on research. Generating multiple housing ideas using building bricks. Understanding what a virtual model is and the pros and cons of traditional and CAD modelling. Placing and manoeuvring 3D objects, using CAD. Changing the properties of, or combining one or more, 3D objects using CAD. Understanding the functional and aesthetic properties of plastics. Programming to monitor the ambient temperature and coding an (audible or visual) alert when the temperature moves out of a specified range. 	<ul style="list-style-type: none"> To know that a 'device' means equipment created for a certain purpose or job and that monitoring devices observe and record. To know that a sensor is a tool or device that is designed to monitor, detect and respond to changes for a purpose. To understand that conditional statements (and, or, if booleans) in programming are a set of rules which are followed if certain conditions are met. 	<ul style="list-style-type: none"> monitoring device electronic sensor thermoscope thermometer research design brief design criteria development inventor vivarium programming loop programming comment alert ambient boolean duplicate copy value variable model sustainability plastic microplastics decompose plastic pollution man-made synthetic

	<ul style="list-style-type: none"> • Stating an event or fact from the last 100 years of plastic history. • Explaining how plastic is affecting planet Earth and suggesting ways to make more sustainable choices. • Explaining key functions in my program (audible alert, visuals). • Explaining how my product's programmed features would be useful for an animal carer. 		
<p>Health Week</p> <p>What could be healthier?</p>	<ul style="list-style-type: none"> • Adapting a traditional recipe, understanding that the nutritional value of a recipe alters if you remove, substitute or add additional ingredients. • Writing an amended method for a recipe to incorporate the relevant changes to ingredients. • Designing appealing packaging to reflect a recipe. • Cutting and preparing recipes safely. • Using equipment safely, including knives, hot pans and hobs. 	<ul style="list-style-type: none"> • To understand where meat comes from - learning that beef is from cattle and how beef is reared and processed, including key welfare issues. • To know that I can adapt a recipe to make it healthier by substituting ingredients. • To know that I can use a nutritional calculator to see how healthy a food option is. • To understand that 'cross-contamination' means that bacteria and germs have been passed onto ready- 	<ul style="list-style-type: none"> • beef • reared • processed • ethical • diet • ingredients • supermarket • farm • balanced

	<ul style="list-style-type: none"> • Knowing how to avoid cross-contamination. • Following a step-by-step method carefully to make a recipe. • Identifying the nutritional differences between different products and recipes. • Identifying and describing healthy benefits of food groups. 	<p>to-eat foods and it happens when these foods mix with raw meat or unclean objects.</p>	
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