



Lower KS2 Progressions of Skills-Design Technology

Year B	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
DT	Would you survive a natural disaster?	Who were the Anglo Saxons? (History)	Would you open Pandora's box?	How can you save the rainforest?	Who's hunting who?	Do you know where your food comes from?
Global Goals	9. Industry, Innovation and infrastructure	16. Peace, Justice and Strong Intentions	13. Climate Action 15. Life on Land 14. Life below water	11 Sustainable Cities and Communities	12. Responsible consumption and production	8. Decent Work and Economic Growth.
British Values	Democracy	Rule of Law	Individual Liberty	Mutual Respect	Democracy	Rule of Law
Enrichment opportunities						
Topic	Cushion	Castles	Electronic game	Pneumatic toy		Food and Nutrition
Knowledge						
Technical Knowledge	<ul style="list-style-type: none"> • Threading needles with greater independence • Tying knots with greater independence • Sewing cross stitch and appliqué • Understanding the need to count the thread on a piece of even weave fabric in each 	<ul style="list-style-type: none"> • Identifying features of a castle • Identifying suitable materials to be selected and used for a castle, considering weight, compression, tension • Extending the knowledge of wide and flat based objects are more 	<ul style="list-style-type: none"> • Understanding what static electricity is and how it moves objects through attraction or repulsion • Generating static electricity independently • Using static electricity to make objects move in a desired way 	<ul style="list-style-type: none"> • Understanding how pneumatic systems work • Learning that mechanisms are a system of parts that work together to create motion • Understanding that pneumatic systems can be used as part of a mechanism • Learning that pneumatic systems force air over a distance to create movement 	<ul style="list-style-type: none"> • Learning that climate affects food growth • Working with cooking equipment safely and hygienically • Learning that imported foods travel from far away and this can negatively impact the environment 	



	<p>direction to create uniform size and appearance</p> <ul style="list-style-type: none"> • Understanding that fabrics can be layered for affect 	<p>stable</p> <ul style="list-style-type: none"> • Understanding the terminology of strut, tie, span, beam • Understanding the difference between frame and shell structure 			<ul style="list-style-type: none"> • Learning that vegetables and fruit grow in certain seasons • Learning that each fruit and vegetable gives us nutritional benefits • Learning to use, store and clean a knife safely
Skills					
Design	<ul style="list-style-type: none"> • Designing and making a template from an existing cushion and applying individual design criteria 	<ul style="list-style-type: none"> • Designing a castle with key features to appeal to a specific person/ purpose • Drawing and labelling a castle design using 2D shapes, labelling: <ul style="list-style-type: none"> - the 3D shapes that will create the features - materials need and colours 	<ul style="list-style-type: none"> • Designing a game that works using static electricity, including the instructions for playing the game • Identifying a design criteria and a target audience 	<ul style="list-style-type: none"> • Designing a toy which 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 	<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
Make	<ul style="list-style-type: none"> • Following design criteria to create a cushion • Selecting and cutting fabrics with ease using fabric 	<ul style="list-style-type: none"> • Constructing a range of 3D geometric shapes using nets • Creating special features for individual designs 	<ul style="list-style-type: none"> • Making an electrostatic game, referring to the design criteria • Using a wider range of materials 	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Knowing how to prepare themselves and a work space to cook safely in, learning the basic rules to avoid food



	<p>scissors</p> <ul style="list-style-type: none"> • Sewing cross stitch to join fabric • Decorating fabric using appliqué • Completing design ideas with stuffing and sewing the edges 	<ul style="list-style-type: none"> • Making facades from a range of recycled materials 	<p>and equipment safely</p> <ul style="list-style-type: none"> • Using electrostatic energy to move objects in isolation as well as in part of a system 	<ul style="list-style-type: none"> • Selecting materials due to their functional and aesthetic characteristics • Manipulating materials to create different effects by cutting, creasing, folding, weaving 	<p>contamination</p> <ul style="list-style-type: none"> • Following the instructions within a recipe
Evaluate	<ul style="list-style-type: none"> • Evaluating an end product and thinking of other ways in which to create similar items 	<ul style="list-style-type: none"> • Evaluating own work and the work of others based on the aesthetic of the finished product and in comparison to the original design • Suggesting points for modification of the individual designs 	<ul style="list-style-type: none"> • Learning to give constructive criticism on own work and the work of others • Testing the success of a product against the original design criteria and justifying opinions 	<ul style="list-style-type: none"> • Using the views of others to improve designs • Testing and modifying the outcome, suggesting improvements 	<ul style="list-style-type: none"> • 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