






DT: Practical Knowledge

Year Three:		Autumn	Spring	Summer
<i>I know how to...</i>				
 <p>Design</p>	Design a product with key features to appeal to a specific person/ purpose			
	Draw and label designs using 2D shapes			
	Label the 3D shapes that will create the features; materials needed and colours			
	Design a product using a pneumatic system			
	Develop design criteria from a design brief			
	Generate ideas using thumbnail sketches and exploded diagrams			
	Create a healthy and nutritious recipe, using seasonal ingredients, considering: taste, texture, smell and appearance of the dish			
	Design and make a template from an existing product			
 <p>Make</p>	Construct a range of 3D geometric shapes using nets			
	Create special features for individual designs			
	Make facades from a range of recycled materials			
	Create a pneumatic system to create a desired motion			
	Build secure housing for a pneumatic system			
	Select materials due to their functional and aesthetic characteristics			
	Manipulate materials to create different effects by cutting, creasing, folding and weaving			
	Prepare self and work station to cook safely in, learning the basic rules for food contamination			
	Follow instructions within a recipe			
	Follow design criteria			
	Select and cut a range of materials/ fabrics			
	Thread needles and tie knots with independence			
	Sew cross stitch to join fabrics			
	Decorate fabrics using applique			
	Complete design ideas with stuffing and embellishments			
 <p>Evaluate</p>	Evaluate own work and the work of others based on the aesthetic of the finished product and in comparison of the original design			
	Suggest points for modification/ improvement of the individual design			
	Use the views of others to improve designs			
	Test and modify the outcome, suggesting improvements			
 <p>Technical Knowledge</p>	Think of ways in which to create similar items			
	Know that wide/ flat objects are more stable			
	Know the importance of strength and stiffness in structures			
	Know how pneumatic systems work and that they can be used as part of a mechanism			
	Know applique is a way of mending or decorating a textile by applying smaller pieces of fabric to larger pieces			
	Know that when two edges of fabric have been joined together it is called a seam and space should be left for this			
 <p>Cooking and Nutrition</p>	Know that some products are turned inside out after sewing so that stitching is hidden			
	Know that vegetables grow in certain seasons			
	Know that imported food is food brought into the country			
	Know that exported food is food sent to another country			
	Know that eating seasonally can have a positive impact on the environment			
Know that similar coloured fruits and vegetables often have similar nutritional benefits				