Design and Technology Progression at St Mawes Primary

	Year 3 and 4	Year 5 and 6
To master practical skills- Food	• Prepare ingredients hygienically using appropriate utensils • Measure ingredients to the nearest gram accurately • Follow a recipe • Assemble or cook ingredients (controlling the temperature of the oven or hob, if cooking) • To know that food is grown, reared and caught in UK, Europe and wider world	• Understand the importance of correct storage and handling of ingredients (using knowledge of micro-organisms) • Measure accurately and calculate ratios of ingredients to scale up or down from a recipe • Demonstrate a range of baking and cooking techniques • Know that seasons may affect the food available
To master practical skills- Materials	• Cut materials accurately and safely by selecting appropriate tools • Measure and mark out to the nearest millimetre • Apply appropriate cutting and shaping techniques that include • Cut within the perimeter of the material • Select appropriate joining techniques	• Cut materials with precision and refine the finish with appropriate tools (such as sanding wood after cutting or a more precise scissor cut after roughly cutting out a shape) • Show an understanding of the qualities of materials to choose appropriate tools to cut and shape
To master practical skills- Textiles	• Join textiles with appropriate stitching • Select the most appropriate techniques to decorate textiles	• Use the qualities of materials to create suitable visual and tactile effects in the decoration of textiles (such as a soft decoration for comfort on a cushion)
To master practical skills- Electricals and electronics	• Create series and parallel circuits	• Create circuits using electronics kits that employ a number of components (such as LEDs, resistors, transistors and chips)

To master practical skills- Construction Mechanics	• Choose suitable techniques to construct products or to repair items. Strengthen materials using suitable techniques • Develop a range of practical skills to create products (such as cutting, drilling and screwing, nailing, gluing, filling and sanding)	• Use innovative combinations of electronics (or computing) and mechanics in product designs • Use scientific knowledge of the transference of forces to choose appropriate mechanisms for a product (such as levers, winding mechanisms, pulleys and gears)