Moorside Primary School
Year 4 D&T

	National Curriculum	Mechanisms and Structures	Textiles	Food and Nutrition
Design	Use research and develop design criteria to inform the design of innovative functional, appealing products that are fit for purpose, aimed at particular individuals or groups Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer aided design	Carry out research, using surveys Can develop their own design criteria regarding what the product should do and what it should look like Describe how specific parts of their product works and how this meets the needs of the user. Develop their ideas by creating labelled, exploding diagrams. Model ideas by creating prototypes / computer aided design.		
Make	Select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting shaping, joining and finishing) accurately Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities	-Can choose the appropriate materials to create their design including the appropriate materials to create a switch. -Can use wire cutters.	-Create a simple 2 piece pattern and use this to make a product fit for a purpose. (eg to create a purse/hand puppet) -Can fill a bobbin and catch bobbin thread on sewing machine with support -Choose/create fabric to use in their design that will create a professional finish fit for purpose	Can choose the appropriate equipment for different mixing techniques. Choose suitable ingredients Weigh ingredients to an appropriate level of accuracy
Evaluate	Investigate and analyse a range of existing products, Evaluate their ideas and products against their own design criteria and consider the views of other to improve their work Understand how key events and individuals in design and technology have helped shape the world	-To look at a range of existing products and identify strengths/weaknesses of each.	-To look at a range of existing products and identify strengths/weaknesses of each. *-To know who created the first commercial sewing pattern.*	Evaluate food based on appearance, texture, smell and taste.
Technical Knowledge	Apply their understanding of how to strengthen , stiffen and reinforce more complex structures Understand and use mechanical systems in their products (for example gears, pulleys, cams , levers and linkages) Understand and use electrical systems in their products (for example, series circuits incorporating switches, bulbs, buzzers and motors) Apply their understanding of computing to program, monitor and control their products	-Design a product with a simple circuit using switches and bulbs or buzzers. -Can create a working switch -Know how to make secure connections. -Use ribbing to strengthen structures -Join cardboard together using tabs, slots or a flange. -Can use a computer program to create a sequence to produce a repeating pattern. e.g. A flashing light on and off		Use given shapes on a computer program to create a design. e.g. Use a computer aided design program to create a net for packaging Choose appropriate ingredients based on taste
Cooking and Nutrition	Understand and apply the principles of a healthy and varied diet Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.			-Understand that food is processed into different ingredients. e.g. Milk into butter -Understand how the seasons affect food available. -Sort foods into the 5 groups,understand all groups and why they differ in size, making up a healthy diet Prepare simple dishes hygienically and safely. Understand different mixing techniques: stirring, cut and fold, creaming. Identify that food and drink are needed to provide energy for a healthy and active lifestyle