SOMERFORD PRIMARY DESIGN AND TECHNOLOGY CURRICULUM

	AUTUMN		SPRING		SUMMER	
EYFS	**Marvellous Me** Exploring tools and materials: play dough, Construction for purpose Tap a shape Threading shapes Material sorting for purpose.	**Colour Magic** Rainbow cakes Candle holders out of clay.	**Bears** Using natural materials construct 'dens' for their bears. Creating bird feeders	**On the Farm** Constructing farmyards Exploring fruits and vegetables and talking about a healthy diet.	**Mini-Beasts** Junk model minibeasts Minibeast holders	**Under the Sea** Threading fish
YEAR ONE	**(Toys)** **Design and make a toy or doll.** Design purposeful, functional, appealing products for themselves and other users based on design criteria. Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics. Explore and evaluate a range of existing products.		**(Up Up and Away)** **Moving pictures based on Jack and the Beanstalk.** Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology. Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]. Evaluate their ideas and products against design criteria. Explore and use mechanisms (Sliders, linkages, levers), in their products.		**(Pirates)** **Fruit kebabs** Assemble or cook healthy ingredients. Understand where food comes from. Cut, peel or grate ingredients safely and hygienically. Identify that people should eat at least 5 portions of fruit and vegetables a day.	
YEAR TWO	**(Fire of London)** **Baking bread** Measure or weigh using measuring cups or electronic scales. Learn 'rubbing in' method found in many recipes. Sort foods into the 5 groups using The Eat Well Plate. Identify that people should eat at least 5 portions of fruit and vegetables a day.		**(Planes, Trains and Automobiles)** **Plan, design and build a vehicle.** Design purposeful, functional, appealing products for themselves and other users based on design criteria. Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics. Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]. **Explore and evaluate a range of existing products.** Build structures, exploring how they can be made stronger, stiffer and more stable. Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.		**(Hats, Hats, Hats)** **Sew a story character hand puppet.** Design purposeful, functional, appealing products for themselves and other users based on design criteria. Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]. Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics. Explore and evaluate a range of existing products. Build structures, exploring how they can be made stronger, stiffer and more stable.	

YEAR THREE	**(Ancient China)** **Ginger Millet Porridge** Prepare ingredients hygienically using appropriate utensils. Measure ingredients to the nearest gram accurately. Follow a recipe. Assemble or cook healthy ingredients (controlling the temperature of the oven or hob, if cooking)	**(Stone Age)** **Models of prehistoric shelters- Structures/woodwork** Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design 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 Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work Apply their understanding of how to strengthen, stiffen and reinforce more complex structures	(**Around the World)** **Light house linked to circuits, switches and bulbs and structures using Modroc.** 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 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 Investigate and analyse a range of existing products Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]
YEAR FOUR	**Jewel of the Nile.** **Make a shaduf- Structure, levers, pulleys** Generate, develop, model and communicate their ideas through discussion, annotated, sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design. Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages Apply their understanding of how to strengthen, stiffen and reinforce more complex structures	**Ancient Rome- Roman Cloaks (Textiles)** **Old bedsheets- sewing simple applique and simple fastening.** 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. 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 Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately	**Monarchs** **Make a healthy meal suitable for Royal banquet. Focus on health, diet, grating, slicing, peeling.** Sort foods into the 5 groups using The Eat Well Plate and identify that this makes up a healthy and balanced diet. Measure ingredients to the nearest gram accurately. Follow a recipe.

YEAR FIVE	**Ancient Greece** **Ancient Greek desserts without nuts included (Pasteli)** Measure accurately and calculate ratios of ingredients to scale up or down from a recipe. Demonstrate a range of baking and cooking techniques. Create and refine recipes, including healthy seasonal ingredients, methods, cooking times and temperatures. Understand and apply principles of a healthy and varied diet. Identify that food and drink are needed to provide energy for a healthy and active lifestyle	**Anglo Saxons/Vikings** **Sewing a Saxon purse with fastening and applique.** 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. 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 Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately. Investigate and analyse a range of existing products.	**Victorian Era** **Cams, levers, pulley and gears inventions.** Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided 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 Understand how key events and individuals in design and technology have helped shape the world Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors.] Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages. Apply their understanding of computing to program, monitor and control their products

YEAR SIX	**Mysterious Mayans** **Mayan Houses and Temples- Exhibiton examples Choose own materials to fit purpose and build on mud base.** Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design 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 Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work Understand how key events and individuals in design and technology have helped shape the world Apply their understanding of how to strengthen, stiffen and reinforce more complex structures	**People and places- Meals from around the world. Children decide the dish of their choice based on countries they are researching.** 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. Create and refine recipes, including healthy seasonal ingredients, methods, cooking times and temperatures. Understand how a variety of ingredients are grown, reared, caught and processed.	**Earth Matters** **Dragons Den Inventions- Focused on improving our world. Bulbs, switches and motors focus.** Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided 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. 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 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 Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately Investigate and analyse a range of existing products. Understand how key events and individuals in design and technology have helped shape the world Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors.] Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages. Apply their understanding of computing to program, monitor and control their products.