Design and Technology Curriculum Implementation

	Autumn		Spring	Summer	
Nursery	**Autumn 1: Marvellous Me**	**Autumn 2: Let's Celebrate**	**Spring 1: Traditional Tales** **Spring 2: Blast Off**	**Summer 1: Growing and Change**	**Summer 2: All Around the World**
Reception	**Autumn 1: Ourselves** The focus this term is being able to look at the different resources on offer and how children can use them safely. Teachers will observe who can use small tools such as scissors and they will support who can't.	**Autumn 2: Celebrations** Children build on their skills from last term and they will use different resources to create Christmas decorations, cards and calendars.	**Spring 1: Traditional Tales** Children make props for their story retelling and explore making masks. **Spring 2: Blast Off** Children are given the opportunity to create different types of transport using junk box modelling.	**Summer 1: Growing and Change**	**Summer 2: Animals** Recreating animal habitats.
Year 1	**Food and Nutrition** Prototype: Fruit salad Techniques: Cutting and peeling Cross curricular: English (sequencing sentences)		**Structures: stronger, stiffer and more stable** Product: Playground equipment; chair for Goldilocks. Knowledge and understanding: Build structures, exploring how they can be made stronger, stiffer and more stable. Cross curricular: Science (everyday materials)	**Mechanisms: levers and sliders** Product: Moving picture/card Knowledge and understanding: Explore and use mechanisms (levers and sliders). Cross curricular: Science (animal including humans).	
Year 2	**Food and Nutrition** Product: Healthy sandwich using bread, wraps, rolls or pitta bread Techniques: Cutting, peeling and grating (spreading) Cross-curricular: English (instructions)		**Mechanisms: wheels and axles** Product: Vehicles Knowledge and understanding: Explore and use mechanisms (wheels and axles). Cross curricular: Science (use of everyday materials)	**Textiles** Product: Puppet Techniques: Running stitch Cross curricular: History (seaside topic, links with Punch and Judy show); Science (uses of everyday materials)	
Year 3	**Food and Nutrition** Prototype: Pizza (using bread/pitta bread/pre-made pizza base) Techniques: Peeling, chopping, slicing, grating and spreading		**Structures: shell structures** Prototype: Gift box; desk tidy Knowledge and understanding: Apply their understanding of how to strengthen, stiffen and reinforce more complex structures. Cross-curricular: English (magical box from: Leon and the Place Between)	**Mechanisms: pneumatic systems** Prototype: Moving character (pneumatic systems) linked to English/favourite book Knowledge and understanding: understand and use mechanical systems in their prototypes. Cross-curricular: Science (forces)	

Year 4	**Food and Nutrition** Prototype: Bread Techniques: Mixing, kneading and baking Cross-curricular: English (instructions for show off)	**Textiles (pencil case or money wallet)** Prototype: Pencil case; money wallet or device case. Techniques: Overstitch, fastenings (e.g. zip, button, velcro) and decoration (e.g. buttons, beads, sequins)	**Control** Prototype: Torch/night light Knowledge and understanding: understand and use electrical systems in their prototypes [for example, series circuits incorporating switches, bulbs, buzzers and motors]. Cross-curricular: Science (electricity)
Year 5	**Food and Nutrition** Prototype: Sweet biscuits Techniques: Peeling, chopping, slicing, grating, mixing, spreading, kneading and baking Cross-curricular: Science (properties and changes of materials)	**Structure: bridges** Prototype: Bridges Knowledge and understanding: Apply their understanding of how to strengthen, stiffen and reinforce more complex structures. Cross-curricular: Science (forces)	**Mechanisms: gears, pulleys or cams** Prototype: Moving toy Knowledge and understanding: Understand and use mechanical systems in their prototypes. Cross-curricular: Science (forces)
Year 6	**Food and Nutrition** Prototype: Savoury scones Techniques: Peeling, chopping, slicing, grating, mixing, spreading, kneading and baking	**Textiles** Prototype: Pillow with embroidery Techniques: Blanket stitch, back stitch	**Control** Prototype: Fairground ride Knowledge and understanding: Apply their understanding of computing to program, monitor and control their prototypes. Cross-curricular: Science (electricity)