

## Design and Technology Whole School Curriculum

Textiles		Mechanisms		Structures		Food		Electrical Systems				
Cycle 1												
Autumn 1		Autumn 2		Spring 1		Spring 2		Summer 1		Summer 2		
Reception	<b>Magnificent Me</b> Children will explore different materials in order to develop their ideas about how to use them and what to make. They will develop their own ideas and then decide which materials to use to express them. They will make Hanoch Piven, ginger bread skeletons, natural collages etc.		<b>Light and Dark</b> Children will explore different materials in order to develop their ideas about how to use them and what to make. They will make shadow puppets, leaf collages, leaf wands & Christmas decorations using natural materials.		<b>People who Help Us</b> Children will decide which material they would use if they were going to create an outfit for a vet/ policeman/firefighter. They will be encouraged to think about the function of the material, to keep the people safe/ comfortable. The children plan and then design a new look for emergency vehicles. They will use paints, collage and different materials.		<b>Food Glorious Food</b> The children will use a range of joining techniques to make models of fruit, veg or other food. They will create large food collage, collaboratively sharing ideas, resources and skills including printing with real food. They will be provided with a range of materials to experiment with.		<b>Growing/Minibeasts</b> During this topic the children will make stick puppets, set up a garden centre role play area and make drawings & paintings of humans and plants. They will safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. They will share their creations, explaining the process they have used.		<b>Minibeasts</b> During this topic the children will make models of minibeasts as well as painting and drawing them. They will safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. They will share their creations, explaining the process they have used.	
Acorn			<b>Seaside - Puppets</b> -design a glove puppet for a particular purpose. -use running stitch and/or over stitch to join two pieces of fabric together. -evaluate their own finished products and say what they think and feel about them?		<b>Animals Great and Small - Sliding Mechanisms End Points (by the end of this unit)</b> Children will be able to create sliding, lever, wheel and pivot mechanisms to make a picture move.				<b>Explorers –Sailing around the World End Points (by the end of this unit)</b>  Children will be able to name, taste and describe a variety of fruits and vegetables. They will be able to design and make healthy smoothies or lollies and design and make a picnic.			
Sapling			<b>British Inventors</b> This design and technology unit focuses on some important Victorian inventions and more recent 20th century inventions created by British inventors and scientists.				<b>Story Books</b> Children will have the chance to explore moving parts in a variety of storybooks and learn how to recreate some of these moving parts using a variety of tools and techniques before investigating different types of fonts and graphics.		<b>Light Up Signs</b> In this unit, children will be design and making using woodworking DT tools and materials, card and paper or even scrap materials to make an decorative light box with illuminated words or letters. The children will evaluate the product they have created.			
Oak	<b>Chocolate</b>				<b>Felt Pencil Case</b> This is building upon the work children carried out in Year 1 and 2 Seaside topic  Plan, design and sew felt pencil cases.				<b>Programming Adventures</b> Children will program and control floor robots, they will generate and develop ideas through discussion.			
								<b>ELECTRICAL SYSTEMS</b> <b>Programming Adventures</b> Children will program and control floor robots, they will generate and develop ideas through discussion.				
Cycle 2												

Year R	<b>Magnificent Me</b> Children will explore different materials in order to develop their ideas about how to use them and what to make. They will develop their own ideas and then decide which materials to use to express them. They will make Hanoch Piven, ginger bread skeletons, natural collages etc.	<b>Light and Dark</b> Children will explore different materials in order to develop their ideas about how to use them and what to make. They will make shadow puppets, leaf collages, leaf wands & Christmas decorations using natural materials.	<b>People who Help Us</b> Children will decide which material they would use if they were going to create an outfit for a vet/ policeman/firefighter. They will be encouraged to think about the function of the material, to keep the people safe/ comfortable. The children plan and then design a new look for emergency vehicles. They will use paints, collage and different materials.	<b>Food Glorious Food</b> The children will use a range of joining techniques to make models of fruit, veg or other food. They will create large food collage, collaboratively sharing ideas, resources and skills including printing with real food. They will be provided with a range of materials to experiment with.	<b>Growing/Minibeasts</b> During this topic the children will make stick puppets, set up a garden centre role play area and make drawings & paintings of humans and plants. They will safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. They will share their creations, explaining the process they have used.	<b>Minibeasts</b> During this topic the children will make models of minibeasts as well as painting and drawing them. They will safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. They will share their creations, explaining the process they have used.
Acorn	<b>Enchanted Forest - Making Smoothies</b>  To be able to design, make and evaluate a smoothie		<b>Castles, Knights, Kings and Queens</b>  To be able to use a pivot mechanism to design and make a medieval catapult.		<b>The Great Fire of London</b>  Children will understand how to collect materials and experiment with ways of creating a model of a Tudor house.	
Sapling		<b>Seasonal Stocking</b> In this unit, children will develop and use their knowledge of, and skills in, a variety of sewing decorating fabric in order to design and make their very own Christmas stocking!	<b>Seasonal Foods</b> In this unit, children will be thinking about these questions: Why are certain foods in season at different times of year? Why is it good to eat seasonal food? How can we include seasonal food in a healthy, varied diet? Children will be following a range of recipes, which use a range of cooking techniques.			<b>Making mini greenhouse</b> In this unit, children will find out the purpose of a greenhouse and how it works, before moving on to exploring how structures like these can be made stable, and what materials would be the most appropriate to use. Children then apply this knowledge and understanding when designing, making and evaluating their very own mini greenhouse!
Oak	<b>Building Bridges Plan Bee</b>	<b>Moving Toys Plan Bee</b>			<b>Fairground Rides Plan Bee</b>	