## Lickey Hills Primary School and Nursery

## Design and Technology Whole School Yearly Overview:



	AUTUMN 2	SPRING 2	SUMMER 2
EYFS - (Continuou s Provision throughout each term)	Marvellous Me Design, make and evaluate a Diva Lamp. Make a 3D sculpture of a firework. Explore harvest to identify where our food comes from. Explore and understand hygiene when working with food and liquids.	All Things Bright and Beautiful Explore materials and how they can be used to make a collage - twist, scrunch. Explore different joining techniques to make a moving flower. Design, make and evaluate a 3D sculpture of a dragon using papier-mache. Explore the changing state of food when it is heated.	Underground, Overground, Wandering Free Use a variety of different materials to create a seaside collage. Use clay to create a 3D sculpture. Explore joining techniques to plan, make and evaluate a string puppet.
YEAR 1	Sliders and Levers  Mechanisms  Design, make and evaluate a moving Christmas card or tree decoration that uses sliders and levers.	Preparing Fruit Cooking and Nutrition Recognise Food Hygiene. Explore and understand the Eatwell Guide Food Plate - identify a balanced, varied diet. Create a healthy snack: Fruit Kebabs, Fruit Salads and Smoothies.	Freestanding Structures Structures Explore different materials and structure joins to design, make and evaluate a free- standing structure to replace the Lickey Hills Monument.
YEAR 2	Preparing Vegetables Cooking and Nutrition Recognise Food Hygiene. Explore and understand the Eatwell Guide Food Plate - identify a balanced, varied diet. Identify vegetables in season. Create a healthy meal involving vegetables: Vegetable soup and a Vegetable Casserole.	Wheels and Axles Mechanisms Explore construction of wheels and axles. Explore aerodynamics (NASA project) Design, make and evaluate a tourist mode of transport that could take visitors around the Lickey Hills Country Park.	Templates and Joining Techniques Textiles  Explore and use a variety of joining techniques including: sewing, stapling, gluing, taping to create a hand held face puppet. Experiment with different materials for aesthetic purposes.
YEAR 3	Shell Structures Structures Structures Investigate different materials and how they can be strengthened - corrugated, folded, laminated. Design, make and evaluate a Christmas Box to hold a Christmas present.	Healthy and Varied Diet - Fats, Sugars and Dairy Cooking and Nutrition Recognise Food Hygiene. Apply their knowledge of a healthy and varied diet. Explore different alternatives to sugar and dairy products. Design, make and evaluate a new fudge product.  (Yr. 3 Science - Healthy Eating)	Levers and Linkages  Mechanisms  Explore different pivots: fixed and loose Design, make and evaluate a litter picker to use within the school grounds.
YEAR 4	Electrical Systems Electrical design  Explore simple circuits including: electrical components, circuit symbols and circuit diagrams.  Identify Electrical Safety. Design, make and evaluate a Christmas Light Up Sign.  (Yr. 4 Science - Electricity)	Healthy and Varied Diet - Carbohydrates Cooking and Nutrition  Apply their knowledge of a healthy and varied diet as explained by the Eatwell Guide Food Plate.  Recognise Food Hygiene. Design, make and evaluate different healthy food types involving carbohydrates: Healthy Tortillas using flatbread, Rice Dish, Scones.	2D Shape - 3D Product Textiles  Explore different joining sewing stitches: over stitch, backstitch and a running stitch. Create a bookmark using varied stitch techniques. Design, make and evaluate a button fastened pencil case.
YEAR 5	Celebrating food culture Cooking and Nutrition Apply their knowledge of a healthy and varied diet as explained by the Eatwell Guide Food Plate. Recognise Food Hygiene. Design, make and evaluate different foods involving herbs/spices - Cinnamon Biscuits, Ginger Cookies, Gingerbread Houses.	Pulleys and Gears  Mechanisms  Build a working circuit that involves a pulley and motor.  Design, make and evaluate a motorised toy car.	Frame Structures Structures  Structures  Explore the different types of Frame Structures: Rigid, Gable Ended, Braced Structures and Tent Structures.  Design, make and evaluate a bird hide that can be added to the Forest School area.
YEAR 6	Electrical Systems Electrical Circuits Explore renewable energy sources - Wind Turbines. Plan, make and evaluate a wind turbine that can power a lightbulb.	Combining different fabric shapes Textiles Explore different joining sewing stitches: over stitch, backstitch, cross stitch and blanket stitch. Design, make and evaluate a mobile phone case.	Celebrating food seasonality Cooking and Nutrition Recognise Food Hygiene. Apply their knowledge of a healthy and varied diet as explained by the Eatwell Guide Food Plate. Explore and understand the difference between Vegetarian diets: Vegan and Pescatarian diets. Design, make and evaluate vegetarian food in season: Salad, Vegetable soups and Vegetable Pizza.