

DESIGN AND TECHNOLOGY

‘All problems are solved by good design’ – Stephen Gardener

CONCEPTS	SKILLS	VOCABULARY	SPIRALS
Innovation Enterprise Design Manufacture Needs Wants Values Imagination Creativity Technology Culture Wealth Well-being Expertise Nutrition	Creativity Imagination Problem solving Designing Practical expertise (making) Using a range of tools Testing Critical evaluation Risk taking Resourcefulness Innovativeness Food preparation Understand and use electrical systems	Design Technology Prototype Product Nutrition Structure – stronger, stiffer, stable, reinforce Mechanism – lever, slider, wheel, axle, gears, pulleys , cams, linkages Electrical circuit, switch, bulb, buzzer, motor	Understanding of the impact of design and technology on daily life Design to a set of criteria Selecting and using the right tool for the task Selecting and using the right material for the task Evaluating products against design criteria Structures Mechanisms Electrical circuits Cooking and nutrition

DT CURRICULUM OVERVIEW 26-27

EYFS	Continuous Provision	Hammers Meccano Construction area Shingle area Building blocks	Wooden blocks Marble Run Junk Modelling Building bridges for animals to cross Tap a shape tools	Cutting and sticking Baking Food preparation Healthy diet
		Autumn Term	Spring Term	Summer Term
KS1	Year 1	Textiles <u>Objective</u> Templates and joining techniques.	Mechanisms <u>Objective</u> Sliders and levers: Make a moving picture.	Food and Nutrition <u>Objective</u> Preparing fruit and vegetables.
	Year 2	Food and Nutrition <u>Objective</u> Baking skills: Design and make Christmas biscuits.	Structures <u>Objective</u> Free standing structures: Create a piece of playground equipment.	Mechanisms <u>Objective</u> Wheels and axles: Build a car that moves.
Lower KS2	Year 3	Food and Nutrition <u>Objective</u> Healthy and varied diet. Design and make healthy lunches.	Textiles <u>Objective</u> 2D shape and 3D product: Design and make a felt 3D toy.	Mechanisms <u>Objective</u> Levers, linkages and pivots: Make a 3D moving scene.
	Year 4	Electrical Systems <u>Objective</u> Simple programming and control: Electrical – turning on a light in a structure.	Food and Nutrition <u>Objective</u> Baking skills: Design and make savoury scones.	Structures <u>Objective</u> Shell structures: Nets and packaging, stiffening and strengthening materials
Upper KS2	Year 5	Textiles <u>Objective</u> Combining different fabric shapes: Design and make a bag - zips, buttons, clasps, velcro.	Food and Nutrition <u>Objective</u> Baking skills: Design and make bread.	Electrical Systems <u>Objective</u> More complex systems: Crumble- e.g. automatic night light or electronic money box.
	Year 6	Structures <u>Objective</u> Frame structures: joints, making small scale framed structures.	Mechanisms <u>Objective</u> Pulleys and gears: Make a moving object e.g. merry-go-round or car.	Food and Nutrition <u>Objective</u> Healthy and varied diet: Make healthy main meals.