

## Chesterton Primary School – Design and Technology Curriculum

### Curriculum Intent Statement

The school's intent for Design & Technology is that D&T is an inspiring, rigorous and practical subject. We aim to enable the children to plan, design and evaluate products that have been made for a real purpose. We use Kapow planning to ensure all key skills are covered and so that the children draw upon knowledge and skills from other subjects such as mathematics, science, engineering, computing and art.

The curriculum uses four key strands;

Design – develop creative, technical and practical expertise

Make – build by applying knowledge and skills

Evaluate – critique and test their own ideas and the work of others

Technical knowledge – learn skills and knowledge to apply to Design and Technology and beyond

**Structures:** Material functional and aesthetic properties, strength and stability, stiffen and reinforce structures.

**Mechanisms/ Mechanical systems:** Mimic natural movements using mechanisms such as cams, levers and sliders.

**Cooking and Nutrition:** Where food comes from, balanced diet, preparation and cooking skills. Kitchen hygiene and safety. Following recipes.

**Textiles:** Fastening, sewing, decorative and functional fabric techniques including cross stitch and applique.

**Electrical systems:** Operational series circuits, circuit components, circuit diagrams and symbols, combined to create various electrical products.

### Design and Technology Vocabulary Progression

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
DESIGN	Purposeful, functional, appealing, design criteria, generate, develop, model, mock-ups		Research, develop, innovative, functional, appealing, sketches, cross-sectional diagrams, exploded diagrams, prototypes, pattern pieces, – Computer Aided Design (CAD)			
MAKE	Tools, materials, components, characteristics		Functional properties, aesthetic qualities			
EVALUATE	Evaluate, explore, existing, products, design criteria		Investigate, analyse			
TECHNICAL KNOWLEDGE	Stronger, stiffer, stable, mechanisms, levers, sliders, wheel, axles		Reinforce, complex, mechanical systems, gears, pulleys, cams, levers, linkages, series circuits, switches, bulbs/lamps, buzzers, motors, program, monitor, control			

## Design and Technology Units of Study

		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Autumn</b>	Element	Structures	Textiles	Mechanical systems	Cooking and Nutrition	Mechanical Systems	Structures
	Unit	Year 1: Constructing a windmill	Year 1: Puppets	Year 3: Pneumatic toys	Year 4: Adapting a recipe	Year 5: Pop-up Book	Year 6: Playgrounds
	additional information	Little Red Hen's Windmill		Moving Monsters	Biscuits		
<b>Spring</b>	Element	Mechanisms	Structures	Textiles	Textiles	Structures	Textiles
	Unit	Year 1: Making a moving story book	Year 2: Baby Bear's Chair	Year 3: Cross-stitch and applique	Year 3: Cross-stitch and applique	Year 5: Bridges	Year 5: Stuffed Toys (alternative theme: Stuffed Easter Eggs)
	additional information			Egyptian Collar	Cushion		
<b>Summer</b>	Element	Cooking and Nutrition	Mechanisms	Cooking and Nutrition	Electrical Systems	Cooking and Nutrition	Electrical Systems
	Unit	Year 2: Balanced diet	Year 1: Wheels and axles	Year 3: Eating seasonally	Year 4: Torches	Year 6: Come dine with me	Year 6: Steady Hand Game
	additional information	Making a tasty wrap		Seasonal Desserts		Plan a 3 course meal and make one course	