

Year 6 Curriculum

DT Objectives (KS2)

Throughout the year

Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design

Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately

Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities Investigate and analyse a range of existing products

Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work

Understand how key events and individuals in design and technology have helped shape the world

Apply their understanding of how to strengthen, stiffen and reinforce more complex structures

Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]

Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]

Apply their understanding of computing to program, monitor and control their products.

Cooking and nutrition:

Understand and apply the principles of a healthy and varied diet

Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques

Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.

	<u>Sticky knowledge</u>	<u>Core Vocabulary</u>	<u>Final product and differentiation</u>	<u>Links to Curriculum Drivers</u>
<u>Autumn</u> Textiles	Use market research to inform plans and ideas Follow and refine original plans Justify planning in a convincing way Show that culture and society is considered in plans and designs.	Back stich, binca, bodkin, cotton thread, cross stitch, hook and eye, loom, pinking shears, press stud, running stitch, seam allowance, sewing machine, tacking, thimble, make, design, plan, product +KS1 vocabulary	Making a waistcoat Pupils with secure understanding indicated by: Using a running stitch to join fabric to make a functional waistcoat. Pupils working at greater depth: Should take care to ensure their stitches are small, neat and follow the correct lines.	Possibilities – Fashion designer - Alexander McQueen, Coco Chanel
<u>Spring</u> Structures	Know which tool to use for a specific practical task Know how to use any tool correctly and safely Know what each tool is used for Explain why a specific tool is best for a specific action.	Tenon saw, vice, wire strippers, screws, nails, accurate, marking out, jointer, junior hacksaw, motor, pliers, rotary cutter, safety ruler, screwdriver, side cutters, snips, spanner, stapler, dowel, build, make, design, plan, product +KS1 vocabulary	Playground landscapes Pupils with secure understanding indicated by: Securing the apparatus to a base and making a range of landscape features using a range of materials which enhance their apparatus. Pupils working at greater depth indicated by: Showing imaginative use of materials in their landscape creation and securely attaching the apparatus for their playgrounds.	Possibilities – Architect - Antoni Gaudi
<u>Summer</u> Electrical systems	Use electrical systems correctly and accurately to enhance a given product Know which IT product would further enhance a specific product	Battery, battery holder, light bulb, bulb holder, buzzer, build, make, design, plan, product	Steady hand game Pupils with secure understanding indicated by: Making and testing a	Possibilities – Electrician/Electrical engineer - Thomas Edison

	Use knowledge to improve a made product by strengthening, stiffening or reinforcing know how to test and evaluate designed products evaluate product against clear criteria.	+KS1 vocabulary	functioning circuit and assembling it within the case. Pupils working at greater depth indicated by: Creating a complex wire shape or their game and attaching this securely to their base.	
<u>Food technology</u>	Explain how food ingredients should be stored and give reasons Work within a budget to create a meal Understand the difference between a savoury and sweet dish Explain how products should be stored and give reasons.	Grams/kilograms, hygiene, ladle, millilitre/litre, spatula, temperature, whisk +KS1 vocabulary	Making a three course meal Pupils with secure understanding indicated by: Following a recipe, including using the correct quantities of each ingredient. Writing a recipe: explaining the process taken. Explaining where certain key foods come before they appear on the supermarket shelf. Pupils working at greater depth indicated by: Following a recipe, including using the correct quantities of each ingredient and adapting the recipe based on their prior research. Writing a recipe: explaining the key steps, method and the ingredients needed. Explaining where certain foods come from before they reach the supermarket and explaining what impact different methods of farming have on the wider world.	Possibilities – Chef - Nigella Lawson