

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Design, Make and Evaluate	<p>Explores with materials and makes models with support</p> <p>Adapts work once finished</p> <p>Returns to and builds on previous learning, refining ideas and developing the ability to represent them</p> <p>Shares creations, explaining the processes used</p>	<p>Draws a model</p> <p>Discusses ideas and explains against design criteria</p> <p>Selects from and uses a range of tools and equipment</p> <p>Evaluates against design criteria</p> <p>Selects and uses a range of materials and components</p>	<p>Designs purposeful, functional, appealing products based on design criteria</p> <p>Explains design</p> <p>Selects from a range of tools and equipment</p> <p>Explores and evaluates a range of existing products</p> <p>Evaluates against design criteria</p> <p>Suggests improvements</p>	<p>Researches and develops a range of design criteria to inform design</p> <p>Designs an innovative, functioning and appealing product that is fit for purpose and aimed at a group/ audience</p> <p>Generates and develops ideas through discussion, annotated sketches and diagrams</p> <p>Uses a wider range of tools/equipment</p> <p>Selects from a wider range of materials/ components</p> <p>Selects materials based on aesthetic quality and explain why chosen</p> <p>Investigates a existing products</p> <p>Evaluates against design criteria</p> <p>Suggests improvements for ideas/ products</p>	<p>Researches and develops design criteria to inform design.</p> <p>Designs an innovative, functional and appealing product that is fit for purpose and aimed at a particular audience or group.</p> <p>Generates and develops ideas through discussion, annotated sketches, cross sectional and exploded diagrams and prototypes.</p> <p>Selects and uses a wider range of tools and equipment.</p> <p>I can select from and use a wider range of materials and components.</p> <p>Selects materials according to their function or aesthetic quality and explains why chosen it.</p> <p>Investigates a range of existing products.</p> <p>Evaluates own ideas/products against design criteria.</p> <p>Begins to understand how key events and individuals in D&T have helped shape the world.</p>	<p>Researches and develops design criteria to inform design.</p> <p>Designs an innovative, functional and appealing product that is fit for purpose and aimed at a particular audience or group.</p> <p>Generates and develops ideas through discussion, annotated sketches, cross sectional and exploded diagrams and prototypes.</p> <p>Selects and uses a wider range of tools and equipment to perform tasks accurately.</p> <p>I can select from and use a wider range of materials and components.</p> <p>Selects materials according to their function or aesthetic quality and explains why chosen it.</p> <p>Investigates a range of existing products.</p> <p>Evaluates own ideas/products against design criteria.</p> <p>Begins to understand how key events and individuals in D&T have helped shape the world.</p>	<p>Researches and develops design criteria to inform design.</p> <p>Designs an innovative, functional and appealing product that is fit for purpose and aimed at a particular audience or group.</p> <p>Generates and develops ideas through discussion, annotated sketches, cross sectional and exploded diagrams, prototype and computer aided design.</p> <p>Selects and uses a wider range of tools and equipment to perform tasks accurately.</p> <p>I can select from and use a wider range of materials and components.</p> <p>Selects materials according to their function or aesthetic quality and explains why chosen it.</p> <p>Investigates a range of existing products.</p> <p>Evaluates own ideas/products against design criteria.</p> <p>Begins to understand how key events and individuals in D&T have helped shape the world.</p>
Technical Knowledge/ Moving Parts	<p>Joins construction pieces together to build and balance</p>	<p>Explores and uses mechanisms – levers and sliders</p> <p>Uses mechanisms in designs</p>	<p>Explores use of mechanisms – wheels and axles</p> <p>Uses mechanisms in designs</p>	<p>Understands and uses mechanical systems - levers and linkages</p>	<p>Understands and uses electrical systems in products – switches, bulbs, buzzers and motors</p> <p>Uses levers and pulleys within designs</p>	<p>Makes levers and linkages</p> <p>Understands and uses mechanical systems in products – gears, pulleys, cams and levers</p> <p>Applies understanding of how to strengthen, stiffen and reinforce more complex structures</p>	<p>Understands and uses electrical systems in products – series circuits with switches, bulbs, buzzers and motors</p> <p>Applies understanding of computing to program, monitor and control a product</p>

							Debugs and problem solves as necessary, identifying ways to improve the functionality of a robot
Materials and Structures	<p>Uses various construction materials</p> <p>Chooses own materials to make junk models independently</p>	<p>Selects materials/ packaging to create design</p> <p>Marks out materials using template</p> <p>Joins materials using tape/ glue</p> <p>Cuts along varied lines</p> <p>Cuts wood dowelling using hacksaw and bench hook (supported)</p> <p>Makes temporary/ fixed joints</p> <p>Builds structure exploring strength, stiffness and stability</p>	<p>Marks out materials using a template</p> <p>Explains use of glue gun</p> <p>Cuts along lines</p> <p>Uses tape/ glue to create temporary, fixed and moving joints</p> <p>Builds structures exploring strength, stiffness and stability</p>	<p>Creates a shell or frame structure, strengthening with diagonal struts</p> <p>Uses a glue gun (under 1-1 supervision).</p> <p>Cuts slots</p> <p>Cuts internal shapes</p> <p>Cuts accurately and safely to a marked line</p> <p>Applies understanding of how to strengthen and reinforce more complex structures</p>	<p>Creates a shell or frame structure.</p> <p>Uses a glue gun (under 1-2 supervision).</p> <p>Cuts slots</p> <p>Cuts internal shapes.</p> <p>Cuts accurately and safely to a marked line.</p> <p>Applies understanding of how to strengthen and reinforce more complex structures</p> <p>Measures and marks a square section and dowelling to the nearest cm</p> <p>Uses a bradawl to mark hole position</p>	<p>Cuts internal shapes</p> <p>Cuts accurately and safely to a marked line</p> <p>Can use a craft knife, cutting mat and safety ruler under 1:1 supervision as appropriate</p> <p>Uses a glue gun under close supervision</p> <p>Cuts accurately to 1mm using strip wood, dowelling and square section</p> <p>Builds frameworks using a range of materials – wood, card, corrugated plastic</p>	<p>Cuts internal shapes</p> <p>Cuts accurately and safely to a marked line</p> <p>Uses a glue gun under close supervision</p> <p>Builds frameworks using a range of materials – wood, card and corrugated plastic</p>
Textiles	<p>Shows an interest in, and describes, texture of materials</p>	<p>Decorates fabrics using pens/ paint/ buttons/ beads/ ribbons</p> <p>Uses templates to cut out shapes</p> <p>Joins fabrics using staples/ glue</p>	<p>Uses a template to cut out shapes</p> <p>Joins fabrics using a running stitch</p> <p>Decorates fabrics linked to purpose</p>	<p>Joins fabrics using a running stitch and back stitch</p> <p>Creates a prototype</p> <p>Creates simple patterns</p>	<p>Refines a range of sewing techniques, including a running stitch, cross stitch, over stitch and back stitch.</p>	<p>Joins fabrics using a running stitch, over stitch and back stitch</p> <p>Explains and uses seam allowance</p> <p>Creates a prototype</p> <p>Uses printing to decorate</p> <p>Creates a simple pattern</p>	<p>Joins fabrics using a running stitch, over stitch and back stitch</p> <p>Uses cross stitch to add detail</p> <p>Explains and uses seam allowance</p> <p>Creates a prototype</p> <p>Uses applique to decorate by gluing/ stitching</p> <p>Creates a simple pattern</p>
Cooking and Nutrition	<p>Knows why and how to wash hands</p> <p>Begins to describe food using senses</p> <p>Learns that following recipes can produce food</p>	<p>Knows why to wash hands</p> <p>Describes food using senses</p> <p>Uses right tools to cut/ chop</p> <p>Discusses and understands where food comes from</p>	<p>Knows why to wash hands</p> <p>Reads a scale to weigh ingredients</p> <p>Uses right tools to cut, peel, grate and chop</p> <p>Understands where food comes from</p>	<p>Prepares and cooks a range of ingredients</p> <p>Works safely and hygienically</p> <p>Weighs and measures using scales</p> <p>Cuts and shapes ingredients using tools and equipment</p>	<p>Prepares and cooks a range of ingredients to produce predominantly savoury dishes</p> <p>Works safely and hygienically</p> <p>Understands and applies principles of a healthy and varied diet</p>	<p>Works safely and hygienically</p> <p>Cuts and shapes ingredients using tools and equipment</p> <p>Prepares and cooks a range of ingredients to produce predominantly savoury dishes</p>	<p>Works safely and hygienically</p> <p>Cuts and shapes ingredients using tools and equipment</p> <p>Prepares and cooks a range of ingredients to produce predominantly savoury dishes</p>

	Begins to use tools to create simple sweet and savoury foods (linked to story books)		Understands and uses the basic principles of a healthy diet	Understands and applies the principles of a healthy and varied diet Understands about where and when food is grown, caught and reared	Weighs and measures using scales Cuts and shapes ingredients using tools and equipment Analyses taste, texture, smell and appearance of a range of foods Joins and combines ingredients by beating, kneading and rubbing	Analyses taste, texture, smell and appearance of a range of foods Joins and combines a range of ingredients Understands and applies the principles of a healthy and varied diet Understands seasonality and knows where and how food/ ingredients are grown, reared, caught and processed	Analyses taste, texture, smell and appearance of a range of foods Joins and combines a range of ingredients Understands and applies the principles of a healthy and varied diet Understands seasonality and knows where and how food/ ingredients are grown, reared, caught and processed
Knowledge Study	Links to key texts – The 3 Little Pigs; Jack and the Beanstalk; The Train Ride	Has an awareness of a range of influential British chefs and cooks.	Has knowledge of a range of car manufacturers over time Begins to understand the impact of packaging on the environment, particularly plastic	Has knowledge of a range of bakers, linking to popular culture (Mary Berry/ Paul Hollywood)	Investigates inventor Thomas Edison and understand his relevance to their torch design. Investigates Isambard Kingdom Brunel and understand his relevance to their bridge design	Investigates inventor James Watt, and understands his impact on the world	Investigates Lucienne Day, learning about her impact on post-war textiles Learns about key computing and coding pioneers, including Ada Lovelace and Alan Turing