

Design and Technology (D&T)

In Design and Technology, we want our learners to become designers, cooks, builders, logical thinkers and creative young people by;

- Researching, making and evaluating a wide range of materials and food.
- Practicing their fine motor skills by developing new skills.
- Using the right tool for the right purpose.
- Have a good understanding of food, including where food comes from, types of food and making healthy choices, including exploring balanced diets.
- Being able to follow simple instructions and recipes.
- Create and design their own recipes.
- Understanding the importance of safety and hygiene.

D&T will allow all learners to become creative and practical in their skills, in a practical approach that is adapted to suit the pupil's needs and abilities. They will explore a wide range of materials and have the opportunities to discover new foods and cookery skills, forming the basis of their functional life skills and ability to reflect and improve on certain aspects of the process. They will progress through Food Technology, Construction and Textiles, incorporating the elements of researching, designing, making and evaluating.

Whilst we maintain high expectations and encourage rapid progress in all our learners, we recognise them as individuals who have, or are still overcoming multiple barriers to learning, considering their EHCP outcomes alongside a Personalised Learning Plan, that ensures the progress they make is meaningful and purposeful to their development.

	STAGE 1	STAGE 2	STAGE 3	Extended Learning
Being Designers	<p>Investigate range of materials demonstrating understanding of function/ purpose</p> <p>Show interest in item, and indicate if like/ don't like</p> <p>Begins to express ideas for design</p>	<p>Begin to find out ways to link and put materials together</p> <p>Copies a simple design on a range of materials</p> <p>Expresses own ideas for a design</p> <p>Give some simple reasons why they like/ don't like a product</p> <ul style="list-style-type: none"> - Like taste/don't like taste - Its strong/ it breaks easily - It looks interesting/ it is dull to look at <p>Know some simple differences between products</p>	<p>Knows properties of materials product</p> <p>Knows what products are best to select for a design, with the user in mind</p> <p>Develops own basic design from a selection of product examples (photographs, 2D and 3D examples, real life experience)</p> <p>Can say what would change / do differently</p>	<p>Considers the views of others to improve a product</p> <p>Takes constructive criticism from others about a product they have made.</p> <p>Continually evaluate the product while making it against a set design criterion</p> <p>Use a programme to design and manipulate a product for a specific purpose</p> <p>Evaluate the product against their own design criteria</p>

		<ul style="list-style-type: none"> - Hot/cold - Strong/ weak - Stiff/ stretchy 		<p>Follow more complex instructions</p> <p>Writes instructions for a peer to follow</p> <p>Uses research to inform design of a product</p>
<p style="text-align: center;">Construction</p>	<p>Manipulate materials</p> <ul style="list-style-type: none"> - Playdough: rolls, squashes, makes indentations-uses pastry cutters - Paper: scrunches, tears - Sand: wets, stirs, makes castles <p>Know how to builds simple structures</p> <ul style="list-style-type: none"> - Stack blocks - Build simple tower 	<p>Knows how to build towers by ensuring strong base and bricks fit</p> <p>Follows a basic model to make simple structures (tower/ bridge/ car/ split pin models)</p> <p>Know how to connect things using</p> <ul style="list-style-type: none"> - Glue, tape, lock in system, nuts and bolts <p>Knows and explores some simple mechanisms</p> <ul style="list-style-type: none"> - Levers, sliders, and wheels 	<p>Knows how to make a model stronger by</p> <ul style="list-style-type: none"> - Using stronger products - Making a base - Propping up <p>Uses mechanical systems in their products</p> <ul style="list-style-type: none"> - Lever - Wheel - Slider - Axle <p>Knows how and is able to use some tools to construct model</p> <ul style="list-style-type: none"> - Hammer, nails - Glue gun - Spanner <p>Follows simple instructions to make a desired product</p>	<p>Select appropriate tools and materials for a given purpose</p> <p>Understand and use electrical systems in their products, e.g. series circuits incorporating. switches, bulbs, buzzers, motors</p> <p>Apply their understanding of computing to program, monitor and control their products</p> <p>Understand how different mechanical systems work and choose the correct mechanical system for the design criteria</p>

Key Vocabulary	roll, squash, press, scrunch, tear, wet/dry, stir, cover, wrap, build, fall down, tower	Bridge, car, face. Pieces, glue, tape, nut, bolt, fix, lever, slide, wheel strong	base, prop, strengthen, axle, hammer, nails, glue gun, instruction	Electricity, circuits, switches, bulbs, buzzers, motors, programme, design, criteria, research
Food Technology	<p>Name common foods</p> <ul style="list-style-type: none"> - Apple - Banana - Crisps - Sandwich - Biscuit <p>Know the function of some utensils</p> <ul style="list-style-type: none"> - Spoon is for stirring - Knife for spreading - Jug for pouring <p>Know to wash hands before touching food</p>	<p>Know basic hygiene routines</p> <ul style="list-style-type: none"> - Wash and dry hands thoroughly - Tie hair back - Wear apron <p>Begins to understand where some food comes from</p> <ul style="list-style-type: none"> - Fruit from trees - Vegetables grow in ground - Milk from cow - Eggs from chicken <p>Knows some of the foods that keep us healthy</p> <ul style="list-style-type: none"> - Milk - Fish - Fruits (apple, banana, orange) - Vegetables (potato, carrots, peas) - Meat (chicken, beef) <p>Know how to perform simple food preparation processes (mixing, spreading, kneading, pouring, sieving, chopping)</p>	<p>Knows and can perform hygiene routines before preparing a snack</p> <ul style="list-style-type: none"> - Washes and dries hands - Clears space - Wipes down surfaces - Ties hair back - Wears apron <p>Knows the original sources of common foods</p> <ul style="list-style-type: none"> - milk, egg, chips, flour, fruit, veg, meat <p>Knows some sweet and savoury food</p> <p>Sweet- sugar, biscuits, cakes, chocolate</p> <p>Savoury- crisps, pizza, vegetables, pasta</p> <p>Begins to follow a simple recipe and knows how to make simple snacks</p> <ul style="list-style-type: none"> - Sandwich - Toast with topping - Jacket potato with topping - Smoothie - Warm microwave meal <p>Weigh ingredients using non-standard measures</p>	<p>Know how to follow a simple recipe</p> <p>Weigh ingredients using standard measuring units</p> <p>With supervision, know how to prepare and cook some savoury dishes</p> <ul style="list-style-type: none"> - Pizza - Pasta - Cottage pie <p>Know the principles of a balanced diet –</p> <p>Carbohydrates</p> <p>Protein</p> <p>Vitamins</p> <p>Fats</p> <p>Nutrients</p> <p>Water</p> <p>Experiment with different foods to create a desired texture/ taste</p>

Key Vocabulary	apple, banana, crisps, sandwich, biscuit, knife, spoon, jug, pour, spread, chop, wash	clean, dirty, dry, hair, apron, fruit, vegetables, fish, meat, eggs, milk, orange, potato, carrot, peas, mix, sieve, knead	germs, hygiene, source, sweet, savoury, hot, cold, toast, timer, recipe, weigh, measure	protein, carbohydrates, vitamins, minerals, fat, recipe
Textiles	<p>Manipulates different fabrics</p> <ul style="list-style-type: none"> - Cover - Wrap - Stretch <p>Begins to know names of different textiles</p> <ul style="list-style-type: none"> - Wool - Cloth <p>Copies a simple pattern</p> <p>-R bead, Y bead, R bead</p> <p>Use adapted safety scissors</p> <p>Begins to thread using chunky plastic needles and pipe cleaners</p>	<p>Knows names of textiles</p> <ul style="list-style-type: none"> - Cotton - Leather - Silk <p>Knows properties of some materials</p> <ul style="list-style-type: none"> - Wool- soft - Silk-smooth - Leather-tough <p>Manipulate materials by</p> <ul style="list-style-type: none"> - Gluing - Cutting - Simple weaving <p>Creates different patterns</p> <ul style="list-style-type: none"> - Printing - Weaving - Sticking shapes - Painting <p>Start to thread with wool, cotton</p>	<p>Uses a needle to sew materials together using a running stitch</p> <p>Knows how to create a simple design by</p> <ul style="list-style-type: none"> - Printing onto fabric - Weaving <p>Knows how to successfully stick materials together</p> <p>Has some simple design ideas to make a production appealing</p>	<p>Select tools for a specific purpose</p> <ul style="list-style-type: none"> - Glue gun - Needle /thread <p>Knows how to use a template to ensure continuity of a product</p>
Key Vocabulary	wool, cloth pat, scissors, cover, wrap, stretch	cotton, leather, silk, soft, smooth, tough, glue, cut, weave, print, paint	design, needle, thread, stitch	template, glue gun