

Design and Technology Overview 2023-2024

Children use measuring skills and then learn how to cut wood using a saw and g-clamp. They also use start to use other equipment like a cordless drill with supervision. They also use PVA glue and zip ties to secure materials to each other.

In upper school, children continue to improve their skills of measuring and cutting materials using practical equipment. They also start to create movement with pulleys and use electrical components to power their products.

Sewing skills are built upon progressively throughout each year. Children practise on binca material to learn the basics of each stitch.

In lower school, the design process in cooking starts with evaluating recipes, taste testing and choosing from a range of different recipes. This progresses to adapting a traditional recipe in year 5, looking at seasonality of ingredients and also the nutritional content of the ingredients.

As children move into upper school, they are expected to use a variety of different stitches and to embellish their products with pattern pieces. Having learnt the basic stitches in lower school, we expect them to improve the quality of their finished products and act more independently.

In lower school, children will prepare biscuits and bread for the oven. They will use mixing bowls, rolling pins, cutters and baking tins. As they progress to upper school, they start to use ovens and hobs (with supervision) to create their recipes.

	Autumn - construction	Spring - textiles	Summer - food
Year 3	Pneumatic Sacophagus <i>Children are able to use practical equipment to create a product using materials have both functional properties and aesthetic qualities.</i> <i>They learn how to how make mechanical systems such as pneumatic systems create movement.</i>	Purse or Wallet <i>Children are able to join fabrics using a range of stitches with increasing independence.</i> <i>They learn how to add further decoration to their work using buttons, beads, sequins etc</i>	Biscuits or Cookies <i>Children are able to design and bake a biscuit within a given budget, drawing upon previous taste testing to influence their selection of ingredients.</i> <i>They learn how to follow a baking recipe, from start to finish, including the preparation of ingredients.</i>
Year 4	Automaton <i>Children are able to use practical equipment with increasing independence to create a product using materials have both functional properties and aesthetic qualities.</i> <i>They use science to help them design a stiff shell-like structure.</i>	Pencil Case with Macrame Keyring <i>Children are able to use a pattern and are introduced to making a prototype of a product.</i> <i>Sewing skills are becoming more accurate.</i>	Bread <i>Children are able to design and bake bread. They will draw upon previous taste testing, choose ingredients and will adapt their recipe after the first 'prototype' bread is made.</i> <i>They learn how to follow a baking recipe, from start to finish, using techniques specific to their product such as mixing, proofing, sieving and kneading.</i>
Year 5	Motorised Buggy <i>Children are able to use practical equipment to create a product that uses mechanical systems such as cams or pulleys or gears create movement.</i>	Original Embroidery Scene <i>Children can create products using pattern pieces and demonstrate an awareness of seam allowance.</i> <i>They are taught how to blanket stitch.</i>	Nutritional Soup <i>Children are able to design, cook and adapt the recipe for a nutritious soup. They will research and taste recipes, choose ingredients and assess which vegetables are seasonal and the most nutritious.</i> <i>They learn how to cook a nutritious soup using a range of techniques including chopping, frying, blending and seasoning. They use a range of kitchen equipment including ovens, hobs and blenders.</i>
Children ARE	LED Night Light <i>Children are able to show more complex electrical circuits and components can be used to create functional products</i>	Tote Bag <i>Children can pin and tack fabric pieces together. They can join fabrics by over sewing, back stitch, blanket stitch and are introduced to machine sewing (if appropriate).</i> <i>Children are able to make quality products with increasing accuracy and independence.</i>	Come Dine with Me Experience <i>Children are able to design and cook a three-course meal independently. They will follow a set budget, ordering the ingredients they need and will work to a given timescale.</i> <i>They learn how to cook a three-course meal using a range of techniques specific to their meal choices. They will use a range of cooking equipment to cook their meal. They will also greet guests, lay the table and serve the food.</i>

