St. Bridget's C of E Primary Design and Technology Curriculum

2024/2025

Inspiring, nurturing and educating our children to serve God by reaching their full potential, serving our local community and by looking after our environment as global citizens of today and tomorrow.

'Love your neighbour as yourself' (Luke 10:27)

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Year Group	Autumn Term	Spring Term	Summer Term
	Our World	**Our Community**	**Our Environment**
Year 1	**Structures: Chair/Throne** Explore stability and methods to strengthen structures, to understand a chair weakness and develop an improved solution for them to use.	**Mechanisms: Wheels and Axles** Learn about the key parts of a wheeled vehicle, to develop an understanding of how wheels, axles and axle holder's work. Design and make a moving vehicle.	**Food and Nutrition: Fruit Pots** Learn to distinguish between fruit and vegetables and where they grow. Design a fruit pot and accompanying packaging. Children learn food preparation skills and greater emphasis on taste testing and ingredient choices.
Year 2	**Textiles: Pouches.** Learn how to sew a running stitch ready to design, make and decorate a pouch using a template.	**Mechanisms: Levers and Linkages** Explore levers, linkages and pivots through existing products and experimentation, use this research to construct and assemble a moving picture.	**Food and Nutrition: Healthy Wrap** Learn about the importance of a balanced diet and use that knowledge to create a tasty wrap.
Year 3	**Structures: Structure** Identify and learn about the key features of a castle/Iron Age Fort, before designing and making a recycled-material Iron Age Fort (structure)	**Mechanisms: Pneumatics** Explore pneumatic systems, then apply this understanding to design and make a pneumatic toy including thumbnail sketches and exploded diagrams	**Food and Nutrition: Seasonal Tart** Learn about various fruits and vegetables, and when, where, and why they are grown in different seasons. Discover the relationship between colour and health benefits. Create a seasonal food tart.
Year 4	**Textiles: Fastenings** Analyse and evaluate a range of existing fastenings, then devise a list of design criteria to design, generate templates and make a purse.	**Electrical Systems: Torches** Identify the difference between electrical and electronic products. Evaluate a range of existing torches and their features, then develop a new functional torch design.	**Food and Nutrition: Adapting a recipe.** Work in groups to adapt an existing biscuit recipe, whilst taking into account the cost of the ingredients and other expenses against a set budget and adapt it to suit a target audience.
Year 5	**Food and Nutrition: Developing a Recipe** Discover the farm to fork process, understand the key welfare issues for rearing cattle. Compare the nutritional value of existing sauces and develop a healthier recipe. Learn a simple bolognese recipe and adapt it to improve nutritional content.	**Structures: Playgrounds** Research existing playground equipment and their different forms, before designing and developing a range of apparatus to meet a list of specified design criteria.	**Mechanisms: Automata Toys** Develop a functional automata window display, to meet the requirements in a design brief. Explore and create cam, follower and axle mechanisms to mimic different movements.
Year 6	**Textiles: Waistcoats** Using a combination of textiles skills such as attaching fastenings, appliqué and decorative stitches, children design, assemble and decorate a waistcoat for a chosen purpose.	**Electrical Systems: Steady hand game** Understand what is meant by fit for purpose design and form follows function. Design and develop a steady hand game using a series circuit, including housing and backboard.	**Food and Nutrition: Come Dine With me** Develop a three-course menu focused on three key ingredients, as part of a paired challenge to develop the best class recipes. Learn about the basic tastes and complementary flavours. Explore each key ingredient's farm to fork process.