

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

**2023/2024**

*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.*

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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: Moving Story Book**  Explore slider mechanisms and the movement they output, to design, make and evaluate a moving storybook from a range of templates. | **Food and Nutrition: Fruit Pots**  Learn to distinguish between fruit and vegetables and where they grow. Design a fruit pot and accompanying packaging. Children to learn food preparation skills and greater emphasis on taste testing and ingredient choices. |
| **Year 2** | **Textiles: Puppet.**  Explore methods of joining fabric. Learn how to sew a running stitch ready to design, make and decorate a puppet using a template. | **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: Healthy Wrap**  Learn about the importance of a balanced diet and use that knowledge to create a tasty wrap. |
| **Year 3** | **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. | **Mechanisms: Levers and Linkages**  Explore levers, linkages and pivots through existing products and experimentation, use this research to construct and assemble a moving picture. | **Structures: Framed Structure**  Investigate and model frame structures to improve their stability, then apply this research to design and create a stable, decorated structure. |
| **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. |