

Subject Area Curriculum Statement for Design Technology at St. Bernard's Catholic Primary School

Intent

Design and Technology at St. Bernard's is an inspiring, practical and applicable subject. DT should encourage children to learn, to think and to intervene creatively to solve problems both as individuals and as members of a team. At St. Bernard's Catholic Primary School, we encourage children to use their creativity and imagination to design and make products that solve real and relevant problems within a variety of contexts, considering their own designs and making evaluations, edits & improvements as they go with support from teaching staff and peers. We aim to, wherever possible, link work to other disciplines such as mathematics, English, science, computing and art. Our children are encouraged to become innovators and risk-takers in Design Technology across the variety of topic areas.

Implementation

Through a variety of creative and practical activities we teach the knowledge, understanding & skills needed to engage successfully in the designing and making process. Our children work in a range of relevant contexts throughout the wide variety of topics they cover during their time at St. Bernard's. When designing and making, the children are taught to

Design, Make, Evaluate, develop **Technical Knowledge** & work on **Key Skills**.

Design

- use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups
- generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional diagrams, prototypes, pattern pieces and computer supported design

Make

- select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing) accurately
- select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities

Evaluate

- investigate and analyse a range of existing products
- evaluate their ideas and products against their own design criteria and consider the views of others to improve their work
- understand how key events and individuals in design and technology have helped shape the world

Technical knowledge

- apply their understanding of how to strengthen, stiffen and reinforce more complex structures
- understand and use mechanical systems in their products
- understand and use electrical systems in their products
- apply their understanding of computing to program, monitor and control their products

Key skills for DT have been mapped across the school informed by the Lancashire Key Learning Indicators for Progress to ensure progression between year groups.

Impact

At St. Bernard's we ensure our children develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world. Our children will build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users and critique, evaluate and test their ideas and products and the work of others. They will understand and apply the principles of nutrition and learn how to cook/bake. Our children will design and make a range of products. A good quality finish will be expected in all design and activities made appropriate to the age and ability of the child. At St. Bernard's children learn how to take risks & becoming resourceful, with constant support to innovate, embrace failure and see it as a challenge and opportunity to learn from, driving them to greater success in design and implementation. Through the evaluation of past and present design and technology, our children will develop a critical understanding of DT's impact on daily life and the wider world. High-quality DT education makes an essential contribution to the creativity, culture, wealth and well-being of our local & global community.