Design Technology

INTENT

It is our intent at Holy Cross Catholic Primary Academy to provide children with a high-quality education in Design and Technology. 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 and others' needs, wants and values. We aim to, wherever possible, link work to other disciplines such as mathematics, science, computing and art.

The children are also given opportunities to reflect upon and evaluate past and present design technology, its uses and its effectiveness whilst being encouraged to become innovators and risk-takers. As part of their work with food, children will be taught how to cook and apply the principles of nutrition and healthy eating. Learning how to cook is a crucial life skill that enables children to feed themselves and others affordably and well, now and in later life.

IMPLEMENTATION

Design and Technology ensures children learn through a variety of creative and practical activities. We believe knowledge, understanding and skills are needed to engage children in a process of designing and making.

In Key Stage 1:

- Designing purposeful, functional, appealing products for themselves and other users based on design criteria.
- Developing, modelling and communicating their ideas through talking and drawing.
- Selecting from and using a range of tools and equipment to perform practical tasks.
- Exploring and evaluating a range of existing products.
- Building structures, exploring how they can be made stronger, stiffer and more stable.
- Using the basic principles of a healthy and varied diet to prepare dishes.
- Understanding where food comes from.

In Key Stage 2:

- Using research to develop design criteria, which informs design ideas.
- Generating, developing, modelling and communicating their ideas through discussion, annotated sketches and diagrams.
- Using a wider range of tools and equipment to perform practical tasks.

- Selecting from and using a wider range of materials and components, including construction materials.
- Investigating and analysing a range of existing products.
- Evaluating their ideas and products against their own design criteria and considering the views of others to improve their work.
- Applying their understanding of how to strengthen, stiffen and reinforce structures.
- Understanding and using mechanical systems in their products.
- Understanding and using electrical systems in their products.

IMPACT

As designers, children will develop skills and attributes they can use beyond school and into adulthood.

Children, through Design Technology, will develop creativeness and technical and practical expertise, which enables them to perform everyday tasks confidently.

Children will be able to solve real life problems and to consider alternative materials specific to a particular audience.

Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world.

Design and technology education will make an essential contribution to the creativity of the children.