

## <u>Curriculum Intent, Implementation and Impact 2022-23</u> <u>Design and Technology.</u>



## Curriculum

Design and technology is a dynamic, practical and exciting subject. It inspires critical thinking, vision, innovation, creativity, team work and collaboration. With foundations in mathematics, art and science the DT curriculum at St Cuthbert's introduces our children to the world of engineering, business, computing and cookery.

Embracing ingenuity and imagination, pupils design and make products that solve relevant problems, considering how the end product will be used with a real life purpose.

A range of DT experiences are offered to students with a wide coverage of focus; including creating a range of structures, mechanisms, electrical systems and food products.

We aim to give children a DT curriculum that enables them to confidently design, make and evaluate by building their technical knowledge and developing their ability to work with a wide scope of materials. We aim to study and make reference to famous engineers, scientists, chefs, and modern day inventors that inspire and provoke thought.

Our aims are:

- •To develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world.
- •To 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
- •To critique, evaluate and test their ideas and products and the work of others
- •To understand and apply the principles of nutrition and learn how to cook.

## Curriculum Implementation

The Subject leader plans for lower and upper KS2 ensuring that all skills are covered during a 2-year cycle and that the activities link with the topics taught in other curriculum subjects to help the children to make connections with their skills and knowledge. In their designing and making, children will apply knowledge and skills of: textiles, food, mechanisms, mechanical systems and structures.

All projects provide learning opportunities for developing creativity through designing skills such as generating, exploring, modifying ideas through drawing, and modelling with materials.

In planning for D and T, we aim to provide learning opportunities for developing key competencies such as problem-solving, teamwork, negotiation, consumer awareness and organisation. Through evaluating the process and their final products, children will be encouraged to improve their own learning and performance.

Children develop and apply knowledge and skills from art and design, science, computing and English in Design and Technology. Teachers will make links wherever possible to help raise standards in both subjects and enhance children's learning.

	Programming and control is used in electrical systems projects in Y5 and Y6 to operate children's products. This builds on work developed in computing.  Children should develop an understanding of the design and made world through first-hand experience. Wherever possible, children will be given opportunities to visit local museums, shops and restaurants and meet with designers, engineers, chefs, architects and students from college or secondary schools.
Curriculum Impact	The 2-year rolling programme of Design and Technology topics ensures coverage of all the D and T curriculum and that the key skills are built on year by year.  There is consistency in the teaching of D and T across all year groups.  There are high quality displays of the children's work, updated regularly.  D and T is given a high profile within the curriculum.  Our dream is that D and T is taught by knowledgeable, enthusiastic and committed teachers who inspire the children to become innovative and confident designers and operators of future technology.