

Cheddington Combined School

Enjoying our learning...sharing our success



Subject Overview for Design Technology

Date reviewed: September 2024

Next review date: September 2025

Design and Technology.

Intent

At Cheddington Combined School we intend to provide a Design and Technology curriculum which is inspiring, enriching and allows for the children to identify their ideas through a creative process, allowing them to communicate intellectually and practically. Through the provision of a broad and balanced curriculum all children are able to develop a sound understanding of the process involved in designing a product that is fit for purpose. The children have the opportunities to research, represent their ideas, explore and investigate, develop their ideas, make a product and evaluate their work. Children will be exposed to a wide range of media including textiles, food and woodwork; through this, children will develop their skills, vocabulary and resilience.

Our Design and Technology curriculum also allows our pupils to explore a range of every day products, thinking about their purpose and how they have been created. At Cheddington Combined School we want to encourage the children to become problem solvers who can work creatively on shared and individual projects.

Within our DT curriculum the children are given opportunities to make cross curricular links, as set out on Curriculum Maestro. At Cheddington Combined School DT is taught as a block three times a year.

Implementation:

Through Curriculum Maestro the DT topics start with an 'Engage' Lesson/s this is to 'hook' the children into the topic and their learning, this may include a memorable experience that the children take part in. The 'Engage' stage reflects on the children's previous knowledge and builds curiosity about the new topic. The children will then progress through a number of 'develop' lessons which teaches the children new skills and knowledge through a variety of different activities. The develop stage allows teachers to challenge the children learning and develops their resilience and perseverance. The children then apply themselves through the 'Innovate' lessons. Teachers adapt their planning to accommodate the children's ideas and concepts that may need to be revisited. The innovate lessons promote problem solving and being creative to showcase their knowledge and understanding. At the end of the topic the children will complete an 'express' lesson. This lesson allows the children time to reflect and express their thoughts and ideas on the topic. The children learn to articulate their thoughts and share their ideas.

The National Curriculum (2014) provides the framework for a balanced programme of study which clearly builds on previous work and takes account of children's experiences. The skills and knowledge that children will develop throughout each Design and Technology topic, as

set out as a planning support on Curriculum Maestro, are mapped across each year group and throughout the school to ensure progression. Teachers ensure that they are following a design, make and evaluate cycle ensures that pupils acquire a broad range of technical knowledge and vocabulary whilst also drawing on disciplines such as Mathematics, Science, Engineering, Computing and Art. Each of these elements should be given equal weight and taught to a high standard. Evidence of each of these strategies should be found in books and photographs and should show clear progression across the Key Stages. Our Design and Technology curriculum is implemented through a variety of different projects over the children's time at Cheddington Combined School.

Design:

Children design a variety of products with a purpose and an intended user in mind. They will research and think about existing products that allow them to develop a design criterion to inform other of their design. When designing a product, children will ensure that it is functional, appealing and fit-for purpose. Planning should be through age appropriate formats such as; sketcher, patterns, template, prototypes and communicating ideas verbally. The use of technology will also be used to support the design of product fit for purpose.

Make:

Whilst making, children will be given a wide range of tools, materials and components including textiles, construction equipment and ingredients. They build and apply a repertoire of knowledge, understanding and skills (ie. cutting, shaping, joining and finishing) in order to make high-quality prototypes and products for a range of users. Staff will discuss and build on the skills from previous years and introduce new skills to support the children's creativity and product making. The children are encouraged to test and think about any adaptations they may need to make to their existing product.

Evaluation:

The children at Cheddington Combined School understand and learn the criteria that is needed to make their product. They develop the skills in being critical, using this skill to support them when testing and making changes to their products. Children will use their knowledge of the criteria and being critical to support others in the class by making recommendations for their products. Throughout the design, make and evaluate process children will analyse a range of existing products to understand how key products and ideas have shaped design and technology globally. Pupils will learn how to evaluate their own design criteria, considering the views of others in order to improve their work.

Teachers ensure that parts of some tasks result in a range of individual responses and their value is recognised. Time for reflection and review enables both children and the teacher to set individual goals.

Teachers provide support to individuals with Special Educational Needs, including More Able and Talented children. Children's individual needs are addressed through in-depth planning and the provision of resources which support learning.

Impact

Assessment of the children's learning in Design and Technology takes the form of consistent monitoring throughout the Design and Technology week. This formative assessment ensures that children's understanding, knowledge and skills and questioning is built into upcoming lessons. Summative assessment is completed at the end of a Design and Technology block, this is completed by class teachers and is used in supporting the next steps in learning as well as informing subject leaders of the knowledge and skills that still need to be embedded within the school.

By the end of Key Stage 2 children are expected to know, apply and understand the skills and processing that are required within the Design and Technology curriculum. Children will be confident in Design and Technology, applying this to other areas of the curriculum and showing an enjoyment for the subject. The children will have a firm foundation of knowledge and skills that are needed for their transition to secondary school.