

## **Design and Technology**

Design and Technology inspires children to use their imagination and creativity to solve real and relevant problems in a variety of contexts. They apply their skills from other curriculum areas such as mathematics, computing, science and art.

Design and technology integrates six key principles within the children's learning process which are: user, purpose, functionality, design decisions, innovation and authenticity. We aim for pupils to learn to take risks, become resourceful, innovative and become enterprising basing their ideas within a real life purpose. Children will be taught skills systematically and made aware of how to use resources safely.

### **Foundation Stage**

Children will be introduced to basic skills and materials for making a range of products. They will be introduced to making a design for their product and refer to it in their making. They will learn about where food comes from and healthy foods in a variety of cooking activities.

### **Key Stage 1**

Pupils will be taught to design functional and appealing products based on specific criteria. They will make their designs using a wide range of tools and equipment. Pupils will explore and evaluate products and make references to their own products. They will develop their technical knowledge of different mechanisms and techniques to improve their work.

All children will develop skills in food technology and an understanding of where food comes from and its nutritional value.

### **Key Stage 2**

Pupils will build on their knowledge and skills developed in Key Stage 1. They will research and develop their own criteria for products and plan in various ways including annotated sketches, diagrams, prototypes and computer aided designs. They will learn to use a wider range of tools safely and purposefully and become more selective in the choice of resources for their projects. Pupils will be able to make effective use of their evaluation to improve their work. They will be able to apply knowledge of mechanisms to their own designs including electrical and computing systems. Pupils will deepen their knowledge of how technology has affected and shaped the world we live in.

All children will develop their skills in food technology, cooking a range of dishes using a variety of techniques. They will develop a deeper understanding of how food is grown, reared, caught and processed, underpinning a crucial understanding of seasonality within foods by the end of Key Stage 2.