



## Design Technology Rationale

Our Design Technology curriculum aims to ensure that all pupils;

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

### Learning Opportunities

Our curriculum is categorised into 6 key areas; Cooking and nutrition, Mechanisms, Structures, Textiles, Electrical systems and Digital World (KS2). Teachers use the Kapow scheme of work to assist with planning and curriculum coverage. Design Technology is taught termly with some units taught in separate blocks ensuring all elements of the curriculum are covered and progression from one phase to another is clear. These six key areas are revisited each year, with Electrical systems and Digital world beginning in KS2.

Cooking and nutrition units are taught in smaller groups and has an additional focus on specific principles, skills and techniques in food, including where food comes from, diet and seasonality.

The curriculum outlines the three main stages of the design process: design, make and evaluate. Each unit follows these stages, to form a full project. Each stage of the design process is underpinned by technical knowledge which encompasses the contextual, historical and technical understanding, required for each strand. From KS1 to KS2, the technical knowledge descriptors build upon prior learning and/or introduce new learning.

Pupils return to the key strands repeatedly cross KS1 and KS2. Each time the key strand is revisited it is covered with greater complexity and upon returning to each key strand, prior knowledge is utilised so pupils can build upon previous foundations, rather than starting again.