

## Curriculum Intent

Design Technology is a practical subject which can inspire pupils to be innovative and creative thinkers. It allows children to use their imagination to solve problems in a variety of contexts and to apply their practical skills and knowledge to different scenarios including real-life situations that are relevant to our rapidly changing world.

We want our Design technology curriculum to enable the children to develop the confidence to take risks, through research, drafting design concepts, modelling and testing. Children are encouraged to be reflective learners who evaluate their work and the work of others and through this process, to develop resilience.

Our curriculum encourages and supports children in developing an awareness of the impact of design technology on our lives and encourages our pupils to be resourceful, enterprising citizens who will have the skills to contribute to future design advancements.

Food technology forms part of our curriculum as this affords the children to develop knowledge and understanding of where our food comes from, nutrition and creating recipes that are healthy and form part of a balanced diet. This is essential education and a valuable life skill.

Our curriculum follows the Kapow scheme of work and meets the National Curriculum requirements for Design Technology.

## **Implementation**

Design Technology is taught discretely over alternate half terms.

Our curriculum incorporates the 3 main stages of the design process – **design, make and evaluate**. Each stage of the design process is underpinned by technical knowledge which encompasses the contextual, historical and technical understanding required for each strand.

Cooking and nutrition has a focus on specific principles, skills and techniques in food, including where food comes from, diet and seasonality.

The children revisit 6 key areas throughout their time in primary school, they are:

- $\circ$   $\,$  Cooking and nutrition  $\,$
- o Mechanisms / Mechanical Systems
- o Structures
- o Textiles
- Electrical Systems (KS2 only)
- o Digital World (KS2 only)

There is a clear progression of skills and knowledge within each strand and key areas across each year group. The spiral curriculum enables children to build upon prior learning, with key areas revisited with increasing complexity as children move through the school. This structure enables pupils to do more and remember more.

Design Technology lessons incorporate independent, paired and group tasks. They also incorporate practical hands on, computer based and inventive tasks. This ensures that lessons are engaging and appealing and cater to a variety of learning styles. There is a focus on the correct use of subject specific vocabulary and children will access a range of knowledge organisers to support this.

## <u>Impact</u>

The impact of the Design Technology curriculum is monitored through formative and summative assessment opportunities. Regular monitoring and evaluating activities, including pupil voice activities and work scrutinies, take place and data is analysed by subject and senior leaders.

Children should leave school equipped with a range of skills and knowledge to enable them to succeed in the next phase of their Design Technology journey as they move on to secondary school.

## Children should:

- $\circ$   $\;$  Understand the functional and aesthetic properties of a range of materials and resources.
- o Understand how to use tools to shape, decorate and manufacture.
- Produce high quality models and prototypes to fulfil design briefs.
- Understand and apply the principles of healthy eating, diets and recipes including key processes, food groups and cooking equipment.
- $\circ$   $\;$  Have an appreciation for individuals and inventions that impact our world.
- Recognise where our decisions can impact the wider world in terms of community, social and environmental issues.

- Self-evaluate and reflect on learning at different stages and identify areas to improve.
- Be able to manage risks well so that they can manufacture products safely and hygienically.