



## **Intent**:

At Birchfield our design technology curriculum is a practical subject that inspires and encourages children to think creatively to solve problems both as individuals and as members of a team. The Design Technology curriculum gives children the opportunity to develop skills, knowledge and understanding of designing and making functional products. Children will acquire and apply knowledge and understanding of a range of materials (including food) and components, mechanisms, structures, existing products and health and safety.

The DT projects for each year group provide opportunities to revisit and apply skills in different contexts. The progression within year groups allows children to revisit techniques and apply previous learning to construct and create new designs and products across a variety of materials and purposes. By the time children reach Year 6, they would have had experience of food technology, textiles, design and construction. They will have used a range of tools, resources and materials, including the use of IT, to create effectively constructed and aesthetically pleasing results. They will have learned to evaluate, adapt and improve their work, providing them with not only a sense of achievement but a strong foundation for the next step of their learning and a key skill for life.



# **Implementation:**

The Design and Technology curriculum follows the National Curriculum design, make and evaluate cycle. Through this 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 is found in books/folders and photographs and shows clear progression across the Key Stages.

#### Design- (Purpose & Criteria):

Our enquiry approach enables design to be rooted in real-life, relevant contexts, where children design products with a purpose and an intended user of the products in mind. They use research and develop design criteria to inform the design of innovative, functional, appealing and fit-for-purpose products. Planning should be through appropriate formats ie. annotated sketches, patterns/templates, communicating ideas verbally and prototypes/mock-ups'.

#### Make - (Making Techniques):

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.

#### <u>Evaluate – (Review & Evaluate):</u>

Children at Birchfield learn to critique, evaluate and test their ideas and products as well as the work of others. They investigate and analyse a range of existing products to understand how individuals and key events have shaped design and technology globally. In addition, they learn to evaluate their work against their own design criteria and consider the views of others in order to improve their work.

### **Impact**:

Pupils at Birchfield will know more, remember more and understand more about DT. They will retain prior-learning and explicitly make connections between what they have previously learned and what they are currently learning. By the time children leave our school they will have:

- An excellent attitude towards learning and independent working.
- The ability to use time efficiently and work constructively and productively with others.
- The ability to carry out thorough research, show initiative and ask questions to develop a detailed knowledge of users' needs.
- The ability to act as responsible designers and makers, working ethically, using a range of materials carefully and working safely.
- A thorough knowledge of which tools, equipment and materials to use to make their products.
- Well developed knowledge and skills within the curriculum which will enable them to be ready for the curriculum at Key Stage 3.