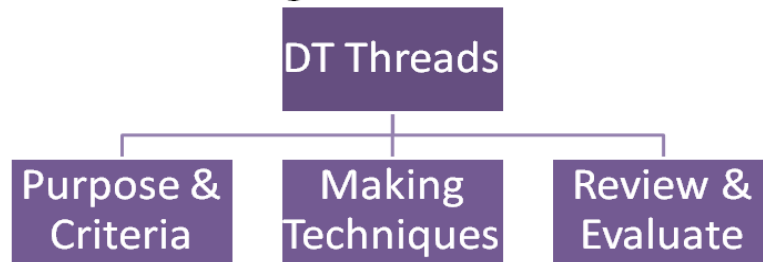


## Key Threads



### **Intent:**

At Birchfield we want our design technology curriculum to be 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. We feel it is vital to nurture creativity and innovation through design, and by exploring the world, we live and work in. Children acquire and apply knowledge and understanding of a range of materials (including food) and components, mechanisms, structures, existing products and health and safety.

The skills learned also help children across the curriculum, for example, understanding the properties of materials in science and measurement accuracy linked to maths. Design Technology should help develop children's skills through collaboration and problem-solving.

Our DT curriculum enables children to think about important issues, our aim is to ensure that the enquiry provides a basis for children to explore and experiment with a variety of different tools and materials to create products of their own. In Early Years children are encouraged to show an interest in technological toys and explore different materials, tools and techniques to construct with a purpose in mind. Year 1 pupils begin to put this exploration into action, building dens with a particular purpose. Links are made to Geography in Year 2, with children making beach huts using joining techniques. Stone Age history in year 3, provides a purpose for children to make simple tools and artefacts a Stone Age person might need.

The DT projects for each year group provide opportunities to revisit and apply skills to develop mastery. 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. It is our intent that DT is taught in all year groups in either discreet or cross-curricular projects. By the time children reach Year 6, they would have had experience of food tech, textiles, design and construction; they should be confidently performing everyday tasks and applying their knowledge, understanding and an increased level of skills as they progress through the school. They will be on the way to becoming risk takers and innovators and will have used a range of tools, resources and materials, including the use of IT, to create effectively constructed and aesthetically pleasing results. This, along with a strong focus on the importance of evaluation, allows children to 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.

Furthermore, children through school are taught cooking and nutrition in the curriculum and we provide a curriculum which enables children to make healthy eating choices. We believe teaching pupils to cook is an important part of promoting a whole school approach to health and wellbeing and attainment.

## **Implementation:**

Through our key threads, the Design Technology curriculum throughout Birchfield Primary School follows the National Curriculum design, make and evaluate cycle. Through this they 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/folders and photographs and should show 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.

### **Evaluate – (Review & Evaluate):**

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:**

The impact of using the full range of tools and resources, will be seen across the school with an increase in the profile of Design and Technology. Children will know more, remember more and understand more about DT. Children 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.
- A passion for the subject.

Children will be equipped with skills and knowledge that will enable them to be ready for the curriculum at Key Stage 3 and for life as a capable citizen in the wider world.