



Bramcote C of E Design and Technology Curriculum

Intent:

Design and Technology at Bramcote C of E equips pupils with the technical knowledge and practical skills needed to understand how products are designed and made. Children develop substantive knowledge of materials, mechanisms, structures, textiles, electrical systems and food, alongside disciplinary knowledge including resilience, problem solving, and perseverance that teaches them to think and work like designers and engineers. Children will be encouraged to think creatively throughout each stage of the plan and design process and value differences through celebrating the designs and products they create.

Through purposeful, practical opportunities pupils learn to design innovatively for real users, make thoughtful choices, and evaluate their work with increasing independence. Pupils will also become discriminating, informed users of products and understand the impact and contributions they can make to our community and wider society. Our curriculum inspires responsible decision-making, including awareness of sustainability and the impact of design on the environment.

Implementation:

At Bramcote C of E, DT is taught weekly for three half terms each year (alternating with Art & Design). We follow the National Curriculum, supported by KAPOW, to ensure clear progression from EYFS to Year 6. Pupils respond to design briefs and scenarios that require consideration of the needs of others, developing their skills in six key areas: Mechanisms, Structures, Textiles, Cooking and nutrition (Food - taught every academic year), Electrical systems (KS2) and Digital world (KS2).

Each of our key areas has a particular theme and focus from the technical knowledge or cooking and nutrition section of the curriculum and follows the Design Process:

1. **Research:** This includes researching and finding about existing products and designers
2. **Design:** Generating ideas, considering user needs, and communicating concepts.
3. **Make:** Applying practical skills to construct high-quality, functional products.
4. **Evaluate:** Critically reflecting on their own work and others' to improve designs.

Impact:

Our DT curriculum ensures pupils leave Bramcote C of E confident and resourceful, able to plan, make and evaluate with purpose and pride. They know how different materials and components function. They will also have developed the disciplinary knowledge required to act as thoughtful, creative designers: generating ideas, solving problems, refining prototypes and evaluating their work with honesty and accuracy. By year 6 pupils are confident makers who can select appropriate tools, work safely and apply practical skills with increasing precision. They understand how design decisions affect people, communities and the environment, and they approach design challenges with curiosity, empathy and responsibility.

Spirituality

The process of creative thinking and problem solving lies at the centre of DT. Pupils have the opportunity to exercise imagination, inspiration and intuition through creativity and risk taking in analysing, designing and manufacturing a range of products. Encouraging this creativity allows pupils to express innermost thoughts and feelings and learn from reflection. As well as inspiring other pupils, ability to think creatively and show innovation increases their own self confidence and belief in their own abilities. Studying the natural world or human achievement instils a sense of awe, wonder and mystery. They consider the purpose of human technological achievement and appreciate and reflect upon the aesthetic nature of materials and design.