

## Design & Technology

*“To understand is to invent.”  
Jean Piaget*

### Intent

Our design and technology curriculum has been developed to encourage creative, curious and challenging minds with a desire for life-long learning. The curriculum is inclusive; we believe there are no barriers to achievement and no limit to aspirations. The design of the curriculum ensures the progressive development of knowledge and skills, offers opportunities for children to take risks and enables them to become resourceful, innovative, enterprising and capable citizens. Through evaluation of past and present inventions and products, children develop a critical understanding of design and technology’s impact on daily life and the wider world, enabling them to participate successfully in an increasingly technological world.

### Implementation

Each design and technology unit is based around a subject focus. All the projects follow a structure where children are introduced to key concepts and build up knowledge and skills over time, using a more comprehensive range of equipment and building, cutting, joining, finishing and cooking techniques as they progress through school. The curriculum incorporates the statutory requirements of the National Curriculum and other experiences and opportunities which best meet the learning and developmental needs of the children in our school.

### What design and technology looks like at Bradfield

- Design and Technology projects are sequenced to provide a coherent subject scheme that progressively develops children’s designing, planning, making and evaluating skills.
- Projects are placed alongside other subject areas to ensure that there are opportunities for making meaningful connections and links.
- The design and technology curriculum’s electronic systems and IT monitoring and control elements are explicitly taught in our science projects to ensure the links between the subjects are highlighted.
- Each design and technology project offers opportunities for children to learn and practice skills discretely.
- Key skills are revisited with increasing complexity in a spiral curriculum model. This allows pupils to revise and retrieve previously taught skills and knowledge and build on their previous learning.
- Children build up their knowledge and understanding of the design process. They design, make, test and evaluate their products to match specific design criteria and ensure they fit their purpose.

- Our progression documents detail the skills and knowledge that are taught within each year group and how these develop to ensure that attainment targets are securely met by the end of each key stage.
- Summative assessments take place throughout the year. Teachers use this information to inform future teaching and learning; ensuring children are supported and/or challenged appropriately.
- Termly Standards Meetings with Governors and staff ensure that areas of strength and priorities for development within design and technology are shared.

## **Impact**

Our curriculum leads children to be creative and curious learners who are willing to take risks and solve problems. As designers children develop skills and attributes they can use beyond school and into adulthood. This is evidenced in a range of ways, including pupil voice, innovate activities and workbooks. Through the study of design and technology, children combine practical skills with an understanding of aesthetic, social and environmental issues, as well as of functions and industrial practices. We ensure that children who are achieving well, as well as those who need additional support, are identified with additional provision and timely strategies discussed and put into place. We aim that all children will make at least expected progress, relative to their individual starting point and their progression of skills.