# **Design Technology at Bowburn Primary School.**

#### Intent

In Design Technology, children are encouraged to explore and experiment with a wide range of design tasks. Through an exciting and engaging curriculum, we teach children to become proficient in the four strands of the design process – design, make, evaluate, technical knowledge, and cooking and nutrition. We aim to inspire all of our children to be innovative, creative thinkers and problem solvers, as well as build confidence and resilience to take risks. We want children to gain an awareness of the bigger picture about the role Design Technology plays in the wider world, and in our lives. By delivering a very thorough and current Design Technology curriculum, we encourage pupils to become resourceful, enterprising individuals, who have interest and ambition to be future designers.

## **Implementation**

#### EYFS:

Through Expressive Arts, children are encouraged to construct and create in practical situations. Good planning promotes and embeds the expressive arts in our learning environment, for example; we provide resources which offer a range of sensory experiences; a range of tools and materials to shape, assemble and join; time and space so children can explore and be creative; and give children opportunities to observe and appreciate the natural world around them. Children enjoy learning through first-hand experiences, putting their ideas into practice whilst developing an awareness and understanding of the possibilities and limitations of different materials. They are encouraged to explore, observe, solve problems, think critically, make decisions and talk about why they have made their decisions as they design and create, whilst allowing them to foster natural creativity within our daily provision.

## Key Stage 1 and 2:

Each half term, year groups alternate between Design Technology, and Art and Design. All children participate in one lesson per week (1 hour minimum), and teachers follow the 'Kapow Primary' scheme, in line with the National Curriculum. We deliver a consistent curriculum, which allows for full coverage, and clear progression of skills and knowledge between each year group, as they transition through school.

Children are exposed to a wide range of challenging projects focussing on key areas which they would not usually get to experience outside of school, including Mechanisms; Structures/Engineering; Electrical Systems; The Digital World; Textiles; and Cooking and Nutrition. Within each project, pupils respond to design briefs, consider the needs of others, and develop their skills in researching, designing, making and evaluating. To ensure development and progression, prior learning and skills are regularly revisited as children move up through school, with an increase in complexity each time. Design Technology lessons are very practical and hands-on, based on a variety of themes which allow all children to realise their ideas. Design technology work is recorded on design sheets, and practical work is photographed and presented in floor books which follow each year group through school. In addition to learning in class, we offer extra-curricular and enrichment activities throughout the school year, including STEM club.

### <u>Impact</u>

Children enjoy Design Technology, and understand both the why's and how's of their learning. By engaging in a practical and extensive Design Technology curriculum, we are providing children with an insight into 'real' Design Technology - preparing them with the basis of skills, knowledge and understanding they need to be successful in secondary school. In addition, they will have an appreciation of Design and Technology, and an awareness of its importance and impact on the world, environment, and community. Children will have knowledge of a range of materials, and make appropriate choices of resources and materials to use in their ideas. By doing so, children produce high quality outcomes, which they reflect on and identify improvements. Our curriculum ensures pupils meet the end of key stage outcomes stated in the National Curriculum. Regular monitoring takes place to ensure progression of skills, for example looking at children's work, visiting lessons and talking to children about their learning experiences.