

**Design and Technology is an inspiring, rigorous and practical subject. Design and Technology encourages children to learn to think and intervene creatively to solve problems both as individuals and as members of a team. We encourage children to use their creativity and imagination, to design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. We aim to, wherever possible, link work to other disciplines such as mathematics, science, engineering, computing and art. The children are also given opportunities to reflect upon and evaluate past and present design technology, its uses and its effectiveness and are encouraged to become innovators and risk-takers. Through a variety of creative and practical activities, we teach the knowledge, understanding and skills needed to engage in a process of designing and making.**

### **Intent**

William Stockton and Wimboldsley primary schools believe:

Design and Technology, experienced in a safe and supportive environment, is essential to ensure children problem solve, experiment and have the confidence to take risks. We intend to deliver high-quality teaching and learning opportunities that inspire all children to succeed in Design and Technology. We want children to enjoy the freedom of Design and Technology lessons, employing creativity and imagination in their techniques.

Our pupils will know how to cooperate and collaborate as part of an effective team, evaluating their own and others' creations.

The curriculum drivers shape our curriculum breadth and are based on our beliefs about providing a high quality education. We ensure we give our pupils appropriate and ambitious curriculum opportunities.

We encourage children to activate their schemas by helping children to relate to previously studied topics to form strong and meaningful new schemas which helps them to know more and remember more.

We ensure that the children are not overloaded with new knowledge which can cause cognitive overload but instead, over time, gain a depth of understanding from building up basic skills.

The skills learnt as part of Design and Technology lessons also link and support other areas of the curriculum, such as mathematics, science and computing. However, interconnected opportunities are sought through every subject.

### **Implementation**

The long term plan sets out the Design and Technology units which are to be taught throughout the year from Nursery to Year 6. This has been planned to ensure that the children cover all of the six the key concepts of: structure, textiles, food, locomotion, computer aided design (CAD) and levers, pulleys and gears over a two-year cycle. This will ensure that all children have the opportunity to be practical, be analytical, review and evaluate, solve problems,

analyse, be resourceful, select and use appropriate tools, communicate ideas and evaluate.

As children move up through the school, skills will clearly develop upon prior learning and there will be clear progression upon skills learnt in previous topics. Teachers ensure that children have the opportunity to retrieve prior learning which increases in both the storage and the retrieval strength.

### **Impact**

Children will be engaged and passionate about Design and Technology lessons; this will be gathered by using the school monitoring system, 'Precision Teach'.

The children will enjoy problem solving and become skilled at evaluating their own and others' designs.

Children will communicate their ideas in a range of ways using key vocabulary and practical demonstrations.

Children will demonstrate the skills that they learn during Design and Technology lessons across the curriculum, particularly in science, maths and computing lessons.

Through our monitoring system, comparative judgements will be made in relation to a pupil's work over time.

Lesson observations will also take place to monitor the pedagogical style of lessons ensuring that they match the schools' and subject's expectations.