

### **DESIGN AND TECHNOLOGY POLCY**

### 1 Curriculum Intent

Our curriculum is underpinned by the National Curriculum and Cornerstones Curriculum, which provide a rich and engaging framework designed to foster a lifelong love of learning. Our curriculum is tailored to meet the unique needs of each child in our local community. Recognising the backgrounds, strengths, and challenges specific to children from our area, we aim to inspire and motivate children through our learning values of Recalling Learning, Making Links, Staying Focused, Asking Questions, Persevering and Using Vocabulary and our Core Values of Excellence, Friendship and Respect.

Through our Curriculum, we aim to:

- Inspire curiosity by connecting learning to real-world experiences and local contexts that are meaningful to the children in our area.
- Cultivate critical thinking, creativity, and problem-solving skills through thematic and cross-curricular projects that adapt to different learning styles and reflect the diverse backgrounds of our community.
- Foster values such as empathy, respect, and perseverance, creating a safe and supportive space where every child feels valued.
- Build an inclusive classroom culture that celebrates diversity, embracing each child's unique strengths, cultural backgrounds, and perspectives.
- By adapting the curriculum to reflect the realities and resources of our local community, we seek to engage children academically, socially, emotionally, and creatively.

Our goal is to equip all students with the knowledge, skills, and confidence to thrive as responsible, compassionate members of their communities, prepared to face the challenges and opportunities that lie ahead.

Our curriculum intent is underpinned by the National Curriculum and Cornerstones. Subject Leaders have worked hard to ensure learning is based in meaningful contexts, that build upon each other as children progress through school.

The most important element of our school is that pupils are challenged, supported, prepared and happy learners.

Our curriculum Champions have been created to inspire and motivate the children to find out more and be interested in Design and Technology. The champion for Design and Technology is Technologist Tia and she is seen around school on displays and in curriculum assemblies.



### 2 Design and Technology Intent

It is the intent of Cawston Grange Primary School for Design and Technology to be an inspiring, creative subject that prepares children for the rapidly changing world around them. From opportunities to take risks, design, create and evaluate their products in the Early Years Foundation Stage, to developing these skills and knowledge even further in KS1 and KS2. We intend for all children to combine their technical and practical skills with an understanding of aesthetic, social and environmental issues when creating a purposeful product for a particular person or group. By providing a rich curriculum that includes diverse designers, creators and products from multiple different places around the world, our pupils will gain a deep understanding and respect for a wide variety of cultures. Children are encouraged to draw on their knowledge of literacy, mathematics, science, computing, art and their understanding of the world around them to select and use appropriate materials and techniques in designing and making their products. As we live in a diverse and ever-changing world, our Design and Technology projects allow children to be creative and reflective thinkers when designing products that can make an impact on their own lives and the lives of people within their community.

### 3.0 Implementation

- **3.1** In the Foundation Stage, pupils explore Design and Technology through the Expressive Arts and Design and Physical Development strands of the Early Learning Goals (ELGs), delivered through the Cornerstones curriculum. Children are given rich, practical opportunities to develop their curiosity and problem-solving skills as they explore different materials, tools, and construction techniques. Through handson experiences, they begin to investigate how things are made, how they work, and how they can be improved. The Cornerstones projects support children in designing, building, and evaluating simple structures and models, encouraging creativity, resilience, and early technical understanding—laying a strong foundation for progression in Design and Technology throughout their primary education.
- **3.2** In Key Stage 1 and 2, the school uses the National Curriculum and Cornerstones as the basis of its curriculum planning. We use Cornerstones to ensure progression and coverage of skills and knowledge, ensuring that all children can and do make progress. Teachers are encouraged to adapt lessons to meet the needs of their cohort and add bespoke lessons using their own creativity and teaching ideas.

# 4.0 The contribution of Design and Technology to teaching in other curriculum areas

- **4.1** Our Design and Technology projects are creatively planned with links across the majority of the subjects in the National Curriculum. They often relate to pupils' learning about their key topics, supporting and developing their historical, geographical and literary knowledge. Computing skills are developed through the application of technological/electric knowledge; opportunities to develop creatively and artistically are presented in the design and making stages; and the importance of cooking balanced dishes and eating healthily is addressed in Cooking and Nutrition projects.
- **4.2 Mathematics** the Design and Technology curriculum is very closely linked to mathematics, as so much of D&T involves careful consideration of weight/size/cost/length/quantities of various materials. Before being able to create a successful product, pupils must design and prepare accurate measurements, e.g. measuring the width of the consumer's head when making a hat, or weighing out correct quantities of ingredients before cooking. Design and Technology projects always involve problem-solving and noticing patterns in design too.
- **4.3 Science** D&T contributes towards the teaching of science in a variety of ways. Through analysing existing products, pupils discover and understand the similarities,

differences, properties and purposes of the products. They can then apply this knowledge in their own designs, which allows for creativity and innovation as pupils explore ways of changing, adapting and combining materials to enhance their own products.

- **4.4 Spiritual, moral, social and cultural development –** The teaching of Design and Technology projects allow children to really consider the impact they can have on the world around them. Everything man-made has been designed, from toothpaste tubes to aeroplanes. This gives pupils every-day context and purpose for their D&T projects, which helps them to take pride in their work and understand the value of analysing, designing, making and evaluating a product. D&T schemes of work are usually designed to support children's social development as they can work as part of a team, collaborating, sharing ideas, and learning to respect other people's ideas. Pupils also are taught about respecting their community, environment and wider world, including taking responsibility for safety of themselves and others. Through a wide range of D&T projects and contexts, children learn to appreciate the value of differences and similarities between cultures, and develop an understanding of the needs of individuals and larger groups.
- **4.5 British Values -** Our teaching of Design and Technology actively promotes British values by encouraging pupils to think creatively, work collaboratively, and respect the ideas and contributions of others. Through designing and making products for real purposes and users, children learn to take responsibility for their own work, consider the needs of others, and reflect on the impact of their designs. They explore the work of a diverse range of designers and inventors from the UK and around the world, developing an appreciation of innovation, heritage, and cultural diversity. DT lessons provide opportunities for pupils to make choices, solve problems, and evaluate outcomes, supporting the development of individual liberty, mutual respect, and tolerance. By working in teams and taking on different roles, pupils gain an understanding of cooperation and fairness—key principles within a democratic society.

### 4.6 Enrichment opportunities

These opportunities are carefully mapped out so that children regularly experience trips or visits linked to the Design and Technology Curriculum. These experiences allow children to delve deeper into a topic area, therefore broadening their knowledge and understanding. (See Trips and visitors Enrichment Plan)

## 5.0 Impact

#### Assessing Impact and Reporting

- **5.1** The most effective way of assessing children's work in Design and Technology is through formative assessments during the D&T lessons. We assess by making informal judgements as we observe and discuss technical concepts with them during lessons, using assessment opportunities highlighted on the medium term planning. During all stages of the D&T process, teachers ask questions to deepen pupils' learning and encourage them to evaluate their designs/creations throughout each stage, not only at the end of a scheme of work. Marking of work should be purposeful and informative for the individual child about how well they are doing in D&T and what they need to do to progress further. Each class teacher will refer regularly to the knowledge organisers, giving children time to read them and test their own knowledge and use of vocabulary. Each year group has a set of sticky knowledge questions to be asked frequently to ensure that this knowledge sticks. Teachers will create their own knowledge organiser / sticky knowledge quizzes. Teachers will adapt their questioning for different abilities, using Walk Thru techniques in order to question and assess all children.
- **5.2** Teachers will add each Design and Technology lesson (whether this be a Cornerstones lesson or Teacher created lesson) to the Cornerstones timetable. At the end of each lesson, they will select that the lesson has been taught. This then allows

the subject champion to check coverage and progression of what has been taught throughout the school.

**5.3** Teachers make a summative assessment of the children's attainment in Design and Technology at the end of each Driver Project and record the results on Cornerstones. Teachers can use the Knowledge and Skills criteria in Cornerstones to assess children working at, below and above the stages expected stage for their Year group. Children's annual school reports indicate the attainment that children have made each year. (See Assessment guidelines for Foundation Subjects)

## 6.0 Monitoring

Monitoring the subject of Design and Technology at Cawston Grange Primary School is carried out regularly to ensure high-quality teaching and learning across all year groups. This includes book trawls to evaluate progression, coverage, and the development of geographical skills and vocabulary. Lesson observations are conducted to assess the effectiveness of teaching strategies and pupil engagement. Pupil voice plays a key role in our monitoring, providing valuable insight into children's enjoyment, understanding, and recall of geographical learning. In addition, trustees undertake visits to observe Design and Technology in practice and meet with staff and pupils to discuss their experiences.