

## INTENT

Design and Technology is an inspiring, rigorous and practical subject. At Hornead, the DT curriculum provides unique opportunities for all children to learn, think and to intervene creatively to solve problems both as unique individuals and as members of a team.

The DT Curriculum ensures that children are well-equipped with the technical knowledge and vocabulary to support them in the design and making of their product and ensure that they can articulate the skills that they have applied, the equipment that they have used and the choices they have made while making their product.

Wherever possible, we link work to other disciplines such as English, mathematics, science, computing and art. The children are encouraged to develop a critical understanding of design and technology's impact on daily life and the wider world, to participate successfully in an increasingly technological world and are encouraged to become innovators and risk-takers.

## IMPLEMENTATION

At Hornead Primary School, we encourage all our pupils to envision themselves as designers and craftspeople, fostering creativity, critical thinking, and problem-solving skills through our comprehensive Design and Technology curriculum. Our aim is to inspire students to explore the world of design, where they can innovate and create, developing both practical and technical skills. Through a carefully structured approach, we guide pupils to work through the three main stages of the design process: *design*, *make*, and *evaluate*. These stages are underpinned by technical knowledge, which includes contextual, historical, and technical understanding tailored to each design strand.

The Design and Technology curriculum at Hornead covers a wide range of topics, with each lesson grounded in one of four main learning strands: *Design*, *Make*, *Evaluate*, and *Technical knowledge*. We explore various key areas such as *Cooking and Nutrition*, *Mechanisms/Mechanical Systems*, *Structures*, and *Textiles*, ensuring that each child gains exposure to a broad and varied skill set. In Key Stage 2, we further extend our curriculum to include *Electrical Systems* and *Digital World* topics, providing pupils with the opportunity to explore more complex areas of design and technology

as they progress. The school's progression of skills ensures that each year group builds upon prior knowledge, allowing pupils to achieve the National Curriculum attainment targets by the end of each key stage.

Throughout the curriculum, pupils engage with design briefs and scenarios that consider the needs of others, developing their skills in the six key areas of design. Real life scenarios allow the children to problem solve for a purpose. Each key area follows the design process and incorporates technical knowledge or cooking and nutrition principles specific to that area. These topics are revisited year on year with increasing complexity, reinforcing learning and allowing pupils to deepen their understanding. A variety of teaching strategies—ranging from independent tasks to group work, including practical hands-on and computer-based activities.

Differentiation is a key aspect of our approach, ensuring that all pupils, regardless of ability, can access the curriculum. At the same time, opportunities to stretch more able pupils are embedded throughout. Knowledge organisers are used in every unit to support both pupils and teachers in recalling key facts and vocabulary, helping to build a solid foundation of knowledge. We also recognise the importance of subject expertise in delivering high-quality teaching. As such, ongoing professional development is available to all teaching staff, empowering them to continuously refine their subject knowledge and enhance the overall learning experience for all pupils.

## **IMPACT**

At Hormead, the Design and Technology (DT) curriculum plays a vital role in developing students' skills, creativity, and problem-solving abilities. The impact of this curriculum is continuously monitored through a combination of formative and summative assessment opportunities, ensuring that each child progresses in their learning journey. Teachers observe and assess pupils throughout each lesson, evaluating their achievements against clearly defined learning objectives. In addition, each unit incorporates a unit quiz and knowledge catcher, which can be utilized at the beginning and/or end of the unit to gauge understanding and progress.

Upon completion of our Design and Technology curriculum, our students will leave school equipped with a wide range of practical and intellectual skills. They will be prepared to succeed in secondary education and will be innovative, resourceful members of society. Our curriculum provides

students with the knowledge to understand the functional and aesthetic properties of a variety of materials and resources. They will also gain the ability to use and combine tools for shaping, decorating, and manufacturing products, with a focus on creating high-quality, innovative outcomes. These include models, prototypes, CAD designs, and products tailored to meet the needs of users, clients, and real-world scenarios.

A key component of our DT curriculum is the exploration of healthy eating and nutrition. Children will understand the principles of healthy diets, key food groups, and the processes involved in preparing and cooking food using various types of equipment. Alongside this, students will develop an appreciation for significant individuals, inventions, and events that have shaped both history and modern life, further deepening their understanding of the impact of design and technology on our world.

Our DT curriculum is designed to prepare children for the rapidly changing world they will encounter. It encourages independent, creative problem-solving and fosters both individual thinking and teamwork. Through this, students are empowered to make positive changes to their own lives and to the wider community. They will also recognize the broader social and environmental impact of their decisions, understanding how their choices can influence the world around them. In addition, self-reflection and evaluation are integral parts of our curriculum, enabling students to identify areas for improvement and to strive for continuous growth.

Our aim is to ensure that all children meet the end-of-key-stage expectations as outlined in the National Curriculum for Design and Technology, developing resilience and determination as they work towards fulfilling their plans. With our school vision at the heart of this curriculum, we provide "A natural home for all children and adults to have the opportunity to flourish within the community, in a unique and happy school rooted in Christian values." By the time they leave our school, children will have the skills and mindset needed to contribute positively to the future, both in their education and in the world beyond Hormead.