

## **Heron's' Moor Academy**

### **Design & Technology**

#### **Intent**

At Heron's' Moor Academy, we want our children to become designers. We recognize the vital role that Design and Technology (D&T) plays in fostering creativity, problem-solving skills, and technological literacy among our students. Our intent is to provide a rich and stimulating D&T curriculum that inspires curiosity, innovation, and a deep appreciation for the design process. We aim to empower our students to become confident, resourceful, and capable designers who can make meaningful contributions to the world around them. Through evaluation of past and present design and technology, children will develop a critical understanding of its impact on daily life and the wider world.

We aim to:

- Stimulate and grow our pupil's enjoyment of DT by building on their creativity and imagination.
- Build and apply knowledge, understanding and skills to design and make high quality prototypes and products for a wide range of users.
- Give opportunities to critique, evaluate and test ideas of their products and the work of others.
- Allow our pupils to make sense of the world in which they live.
- Teach them to think scientifically.
- Use a planned range of investigation and practical opportunities to give pupils the opportunity to experience, explore and understand scientific concepts. Through these they will acquire the essential scientific enquiry skills needed to deepen their scientific knowledge. Learning opportunities allow the acquisition and development of the scientific skills of : observation, accurate measurement, prediction, hypothesising, experimentation, communication, interpretation , explanation and evaluation.
- Introduce and establish the language and vocabulary of science within design technology.
- Develop the pupils' practical skills and their ability to make accurate and appropriate measurements, so that these are embedded.
- Develop a respect for the materials and equipment that they use, ensuring their own and other children's safety.

## **Implementation**

At HMA we follow the CLF curriculum. DT is taught through specific topics either on a weekly basis or specific DT focussed whole days. Our DT curriculum is designed to engage students in hands-on, practical activities that encourage exploration and experimentation. We will integrate key design principles, technical skills, and real-world problem-solving scenarios into our lessons. The implementation plan includes:

- Structured learning sequences that build upon previous knowledge and skills, ensuring a progressive and developmentally appropriate DT curriculum.
- Cross-Curricular Connections: Integration of DT with other subjects, fostering interdisciplinary learning and demonstrating the relevance of design principles in various contexts.
- Use of Technology: Utilization of tools and technologies to expose students to modern design processes.
- Practical Projects: Engaging students in meaningful projects that encourage collaboration, critical thinking, and problem-solving. Projects may include designing prototypes, creating functional products, and addressing real-world challenges.

## **Impact**

By the end of their primary education at Herons' Moor Academy, our students will:

- Demonstrate Creative Thinking: Exhibit creative thinking skills through the development of unique and innovative designs.
- Technical Skills: Attain skills in using a range of tools and technologies relevant to design and technology, preparing them for future academic and professional pursuits.
- Confidence and Independence: Develop confidence and independence in their ability to ideate, plan, and execute design projects from concept to completion.
- Problem-Solving Skills: Develop strong problem-solving skills, enabling them to approach challenges with resilience and creativity.
- Appreciation for Design: Develop an appreciation for the impact of design on the world around them, fostering a lifelong interest in the intersection of creativity and technology.

Herons' Moor Academy aims to equip students with the skills and mindset necessary for success in a rapidly evolving world.