

# Design and Technology

**“Creativity is allowing yourself to make mistakes. Design is knowing which ones to keep.”**

**Scott Adams**

**DT threads: Creativity, Enquiry and Problem Solving.**

## Design and Technology Curriculum Rationale at Dorchester Primary

Design and technology is an inspirational subject that develops innovative and creative thinkers who have an appreciation for the wider world and the impact they can have in their community. We want to develop confident risk takers who are successful through drafting design concepts, modelling, and testing. Pupils become reflective learners through the evaluation of their work and the work of others. Our aim is to foster an awareness of the impact of design and technology on our lives and encourage pupils to become resourceful, enterprising citizens who will have the skills to contribute to future design advancements.

Our curriculum has a clear progression of skills (see Design and Technology progression document) that develops children's knowledge and understanding across these 6 strands:

- Mechanisms
- Structures
- Textiles
- Cooking and nutrition (Food)
- Electrical systems (KS2)
- Digital world (KS2)

Each of these strands follows an iterative process (design, make and evaluate) and has a particular theme in order to provide context for the children's learning. The scheme we use is a spiral curriculum, with key areas revisited again and again with increasing complexity, allowing pupils to revisit and build on their previous learning. In each project, pupils respond to design briefs and scenarios that require consideration of the needs of others, developing their skills and knowledge in a range of contexts and for real users. Children explore and develop their skills each year through 3 main threads: **Creativity, Enquiry and Problem Solving.**

### **Children will:**

- Understand the functional and aesthetic properties of a range of materials and resources.
- Understand how to use and combine tools to carry out different processes for shaping, decorating, and manufacturing products.
- Build and apply a repertoire of skills, knowledge and understanding to produce high quality, innovative outcomes, including models, prototypes, CAD, and products to fulfil the needs of users, clients, and scenarios.
- Understand and apply the principles of healthy eating, diets, and recipes, including key processes, food groups and cooking equipment.
- Have an appreciation for key individuals, inventions, and events in history and of today that impact our world.
- Recognise where our decisions can impact the wider world in terms of community, social and environmental issues.
- Self-evaluate and reflect on learning at different stages and identify areas to improve.
- Work collaboratively with others and communicate effectively.

### **Teachers will:**

- Build lessons around the DPS Pillars and the Design and Technology threads.
- Recap prior learning at the start of every Design and Technology lesson
- Follow the schools' progression document.
- Ensure children have access to high quality resources.
- Promote high quality discussions and debate using relevant, subject specific vocabulary.
- Promote enjoyment and progress through planning exciting, challenging and engaging learning opportunities for all.
- Produce clear, up to date Knowledge Organisers which are shared with the children and referred to constantly.
  - Provide opportunities for children to be creative and apply problem solving skills to a variety of contexts.