Design Technology

Substantive and Disciplinary Knowledge

At Orchard Primary School, we recognise the importance of encouraging pupils to think, share ideas and creatively solve problems in the world around them. We strive to develop their technical understanding and skills so that they can learn about design methods and investigate their environment and its everyday materials.

Through our curriculum, we aim to build an awareness of the impact of Design & Technology on our lives and encourage pupils to become resourceful, problem- solving citizens who will have the skills to contribute to the ever-changing world. We acknowledge the link to other disciplines such as Mathematics, Science, Computing and Art.

A clear understanding of key substantive and disciplinary knowledge for Design & Technology ensures progression between year groups, and thus allows pupils to move forward in their learning and make necessary links in key concepts.

Knowledge in Design Technology:

Substantive knowledge concerns the key facts, concepts, principles and explanatory frameworks in a subject.

Disciplinary knowledge is needed in order to think, process and develop understanding with the subject.

At Orchard Primary School, substantive knowledge in Design &Technology is based on the knowledge of four key elements of the process of design: design, make, evaluate and gather technical knowledge.

All of these elements are taught in all year groups:

Make	Know how to safely and carefully cut, join and finish a range of materials, ranging from paper to wood, using a variety of tools.
Evaluate	Know how to investigate, evaluate and analyse a range of products and their own designs based on specific criteria.
Technical	Know how to apply their knowledge of materials to meet the criteria above in the design, make and evaluate stages. Use technical vocabulary with confidence and accuracy.