



Design and Technology Curriculum Offer

Intent	<p>Purpose: Pupils will develop their creativity, imagination and practical skills to design and make products that solve real problems in a range of contexts, considering the needs and wants of the end user. Pupils will learn how to take risks and become more resourceful, innovative and enterprising. Pupils will be able to evaluate past and present design work and designers, to develop an understanding of how they impact daily life and influence the wider world. Pupils will learn the importance of design and technology and its essential contribution to life today, and in the future.</p> <p>Relationships: Pupils will make explicit links between Design and Technology and other subjects, such as Mathematics, Science, History, Computing, Music and Art. They will develop and build on their practical skills and technical understanding throughout their time at Uplands; for example, in EYFS, pupils begin to prepare food and use equipment safely while understanding and discussing the need for hygiene when cooking and by the end of KS2, pupils are able to consolidate their knowledge to design and independently make a nutritionally tailored hot meal.</p> <p>Impact: Pupils will have developed creative, technical and practical expertise in cookery, sewing, woodwork, mechanisms and electrical circuits. Pupils will have learnt how to solve problems through innovation and risk taking. Pupils will be able to use and apply principles of nutrition while learning how to cook. Pupils will understand that learning about designers improves their understanding of how design techniques have developed over time and shape the world in which we live. Design and Technology teaching will have developed understanding of how creativity, technology and practical skills can be combined to design products that meet specific criteria and ultimately provide a viable solution to the design brief.</p> <p>Metacognition: Knowledge Organisers are often used to provide information about designers, provide annotated diagrams, set out key facts and vocabulary. Pupils are taught to evaluate and critique existing designs, test their ideas and fully evaluate their own work against the design brief. Pupils will use and develop their technical knowledge to explore and use mechanisms in their designs. Units are driven by a clear outcome and are planned to make it explicit which knowledge, understanding and skills the pupils will need to be successful. Skills are revisited throughout a pupil's journey through Uplands and this aims to deepen, reinforce and develop the pupils' skills and knowledge.</p> <p>Experiences: Pupils are exposed to a variety of practical design challenges during their time at Uplands and every year group utilises the cookery room during the year. In EYFS, pupils learn how to join materials together and use woodwork tools safely. They also design and make junk models, use malleable materials to make models and make junk model habitats reflecting on the success of the model. In KS1 and KS2, an annual open-ended homework challenges provide pupils with the opportunity to choose to utilise their learning in Design and Technology: pupils will decide</p>
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	<p>how and what to create to meet the set criteria. Year 6 are also exposed to an engaging and enjoyable school trip to Milestones.</p>
Implementation	<p>Design and Technology has been carefully planned for progression across the whole school. Pupils will develop skills, utilise and maximise creativity and make links with Art and Design, as well as other subjects. Planning follows a pattern of looking at designers, specific design techniques or types of food, learning how these have developed or changed over time, and then pupils are challenged to design and make their own product to meet a set design brief.</p> <p>Design and Technology units are driven by a design brief that requires the pupils to apply their creative thinking, technical knowledge and practical skills to design and make a product that meets the design brief.</p> <p>Design and Technology is assessed through pupils' independently created designs, paired talk and whole class discussions, oral explanations, written critiques and pupils' written evaluations of their products against the design brief.</p> <p>Pupils are considered to be GDS if they have effectively critiqued the designer or design focus of the unit and grasped the key aspects to utilise in their own design to effectively meet the design brief. They are also able to develop their creative, technical and practical skills and use them effectively when producing their product. Finally, they are able to evaluate their finished product against the design brief and describe how well they have achieved the set objective or how they would change their product to improve it.</p> <p>Key English skills such as reading and writing are used when recording learning and accessing new and key information. Oracy skills are practised throughout Design and Technology lessons, providing opportunities for pupils to discuss and share ideas in the form of group work, discussion and critiquing each others' work.</p> <p>Subject leaders have a high standard of subject knowledge, support the teaching of their subject and ensure that staff feel confident to teach this area of the curriculum.</p>



Impact	<p>Pupils can talk about a range of designers, design techniques and different types of food and can explain how they have shaped the world in which we live.</p> <p>Pupils can make explicit links and connections between different Design and Technology units across year groups and between subjects.</p> <p>Pupils enjoy Design and Technology and are excited to share their journey from researching an area, creating a design to meet a brief, using and applying their practical skills and evaluating their finished products.</p> <p>Pupils understand the value of learning about Design and Technology and the essential contribution it makes to their creativity, culture, practical skills and technical understanding.</p>