

Design and Technology

<p>Vision and approach for DT</p> <p>At Swanmore, it is our aspiration that children become resourceful, innovative, and confident problem solvers within a variety of contexts, maximising their potential in each of the 5 areas of Design and Technology. Design and Technology is an inspiring and practical subject. Using creativity and imagination, pupils design and make products that solve real and relevant problems, within a variety of contexts, considering their own and others' needs, wants and values.</p>	<p>Key concepts</p> <div style="display: flex; justify-content: space-around;"> <div>design technology evaluation innovation</div> <div>nutrition data functionality</div> </div>	<p>Content and Sequencing</p> <p>Learning is sequenced so that knowledge is built upon each year. Children They apply understanding of how to strengthen, stiffen and reinforce complex structures, including mechanical systems, electrical systems and computing. Children understand and apply the principles of a healthy and varied diet as well as being able to create their own food and recipes.</p>
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Curriculum Drivers

Experiential	Curiosity	Independence	Resilience	Rich in language	Community
DT is not only taught but experienced. Children will have initially followed teacher led enquiries and investigations, before exploring materials and construction techniques to find solutions to meet the brief.	Children will have developed a curiosity and fascination through learning about a range of materials and techniques to solve problems. Their curiosity develops the questions they want answered during their learning and time is spent finding the answers.	From their very first days at the school, all children are encouraged to be fearless, creative and independent with free flow access to a range of materials and tools for constructing and de-constructing: materials such as guttering, construction kits, junk modelling and mud kitchen are all readily accessible and the safe handling of tools taught. As children grow in confidence with skills, they will have generated their own questions, enquiries and conclusions as they problem solve using tools and materials appropriately to make their product.	As children progress through the school, into KS1 and KS2, this creativity and resilience continues to be promoted with pupils able to build knowledge from exploring and investigating the natural as well as manufactured world. Children are exposed to the principles of a healthy and varied diet to create their own food and recipes, considering seasonality and global impact.	The quality and variety of vocabulary is a key factor in articulating key concepts clearly and precisely. This language assists children making their thinking clear, both to themselves and others.	Through research and evaluation of past and present products, we aim for children at Swanmore to develop a critical understanding of DT on daily life and the wider world. Children are able to develop criteria to inform the design of functional, appealing products that are fit for purpose. They are taught how key events and individuals in design and technology have helped shape the world.

Links with Mathematics and English	Progressive	Inclusive
<p>Opportunities to apply their English skills:</p> <ul style="list-style-type: none"> ➤ Explanations about design ideas ➤ Presentations about projects ➤ Evaluations <p>Opportunities to apply their Mathematics skills:</p> <ul style="list-style-type: none"> ➤ Data collection and analysis ➤ Rounding, averages ➤ Measuring, estimating, directional 	<ul style="list-style-type: none"> ➤ Geographic enquiry will be evident in books. ➤ Knowledge acquired in prior years will be built upon in subsequent years ➤ Children can talk confidently at each stage about each concepts in Design Technology ➤ Evidence of children applying their understanding after the unit of learning or another subject. 	<ul style="list-style-type: none"> ➤ Task varied to support children to access the task. ➤ Learning is challenging. ➤ Children's starting point are identified using assessment tools and teaching builds on prior knowledge. ➤ The curriculum is practical to engage all. ➤ The outside environment and other resources are used to aid understanding.