

## Design and Technology

<p style="text-align: center;"><b>Vision and approach for DT</b></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 style="text-align: center;"><b>Key concepts</b></p> <p>design technology evaluation innovation</p>	<p style="text-align: center;"><b>Content and Sequencing</b></p> <p>Learning is sequenced so that knowledge is built upon each year. Children then 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>
--	---	--

### Curriculum Drivers

Motivation	Reflection	Perseverance	Independence	Curiosity
<p>Motivation is shown through hands-on, creative tasks that encourage pupils to explore, experiment, and solve real problems. Children are motivated when they can design and make their own products, as this gives them a sense of ownership and achievement. Practical activities, such as building models or testing materials, make learning engaging and meaningful. Teachers also support motivation by setting clear goals, offering positive feedback, and allowing pupils to work collaboratively, which builds confidence and enthusiasm for learning.</p>	<p>Reflection is shown through pupils thinking carefully about their design choices and learning from each stage of the process. Children are first encouraged to evaluate existing products before learning new skills and evaluate their work, considering what went well and what they would improve next time. This may be done through class discussions, written work, or peer feedback, helping pupils to develop critical thinking skills. By regularly reviewing their ideas and outcomes, pupils at build resilience and a deeper understanding of how to refine and improve their designs.</p>	<p>Perseverance is shown through pupils’ willingness to keep trying, even when their designs do not work the first time. Children are encouraged to view mistakes as part of the learning process, whether they are refining a structure, adjusting materials, or improving a mechanism. Teachers support this by promoting a positive, growth mindset and celebrating effort as well as outcomes. Through revisiting and improving their work, pupils develop determination and confidence in their ability to overcome challenges.</p>	<p>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.</p>	<p>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.</p>

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