

Overview of Design and Technology at Sowe Valley Primary School



Vision (Intent)	Immersion (Our Offer)	Personalising the Curriculum to Sowe Valley (Implementation)	
<p>The national curriculum aims to ensure that all pupils:</p> <ul style="list-style-type: none"> develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users critique, evaluate and test their ideas and products and the work of others understand and apply the principles of nutrition and learn how to cook. <p>When designing and making, we will ensure that pupils will be taught to:</p> <ul style="list-style-type: none"> use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities investigate and analyse a range of existing products evaluate their ideas and products against their own design criteria and consider the views of others to improve their work understand how key events and individuals in design and technology have helped shape the world develop their technical knowledge to apply their understanding of how to strengthen, stiffen and reinforce more complex structures understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] 	<p>Current Practice:</p> <p>At Sowe Valley, we are developing our own curriculum that makes cross curricular links in many areas. This curriculum aims to enhance and deepen children's knowledge in a range of subject areas. Children build on the previous knowledge that they have developed not only in design and technology but also in science and computing.</p> <ul style="list-style-type: none"> In Year 2, children are able to put their questions to the children's paper engineer and illustrator Jo Lodge who has made a range of children's books with moving parts. In Year 3, the children visit Pizza Express and work in a professional environment to create their pizzas before later applying these skills in the classroom. In year 5, a visit to the MAD Museum in Stratford gives the children an opportunity to see the work of a range of designers. Children will be able to see and interact with a range of mechanical art and design. <p>Further Development:</p> <ul style="list-style-type: none"> Develop knowledge maps for each unit of work Continue to develop resources, ensuring they meet the needs of the units of work Enhance food units by growing own salad leaves and vegetables in advance of the relevant units of work Year 2 and Year 4. Develop learning journeys for each unit of work Secure links with Ernesford Grange to ensure that use of their enhanced facilities support relevant units of work – especially cooking 	<p>Reception</p> <p>Year 1</p> <p>Year 2</p> <p>Year 3</p> <p>Year 4</p> <p>Year 5</p> <p>Year 6</p>	<p>In Reception, children</p> <p>Food Make yoghurt-dipped fruit for Xmas treat. Cutting soft fruit with cutlery knife Axles and wheels DME a vehicle to transport patients that have been hurt in the Fire of London DME Structures Create a bridge for to link Isle of Struay to the rest of Scotland</p> <p>Levers and Sliders – DME a pop-up page of a fairy tale book for Reception children Textiles – use running stitch to create a gift for Mother's Day or Easter Food DME a healthy summer salad from school grown lettuce, cress etc</p> <p>Structures DME a portable shelter for a hunter gatherer using selected resources (range given). Investigate tripods Pneumatics DME a pneumatic volcano Food DME pizza for Sowe Pizza Company. Investigate range of toppings- linked to Italy.</p> <p>Levers and linkages: create a pop-up book based on Invaders Structures DME using square dowelling and cardboard corners create a double layered structure (2 levels) Food DME create a cottage pie using grown vegetables</p> <p>DME – CAM make Ancient Greek Olympic toy to sell as merchandise DME an electric game- (simple circuits and switch) Food: DME a kebab suitable for a summer BBQ Create a balanced dish</p> <p>Pulleys: Research and make a car using a kit with pulleys. Textiles bag reuse/recyclable materials DME – make a bread in chosen style with flavouring</p>

