

DESIGN AND TECHNOLOGY AT YARDLEYS

INTENT: The Design and Technology Curriculum aims to nurture the designers, engineers, and architects of a more sustainable world where they can be reflective and creative individuals able to solve real-world problems using practical solutions. Students are encouraged to consider the needs of others when designing and making products, taking into account the values, culture and the well-being of the nation. We also encourage them to take risks and question the world around them by understanding that design is all around us and that design is for all. The Design and Technology curriculum will give all students the cultural capital they need to succeed in life as well as the ability to challenge and change the ever-changing world of Design and Technology.

Y9 DESIGN AND TECHNOLOGY

Pupils undertake a longer and more detailed design and make project with a greater emphasis on the needs of the user and designing in an iterative way. User feedback is used to modify and develop their final designs which are presented in greater detail using a wider range drawing, modelling and making skills.

YEAR 9

Theme	Research and Designing in Design and Technology Choice of: 1. Flat-pack Hanging Mobile 2. Flat-pack LED Table Lamp	Developing and Modelling in Design and Technology	Making, Testing and Evaluating in Design and Technology
SUBSTANTIVE KNOWLEDGE	Understand the needs of the User Researching the design problem Analysing the research Design Specification	Producing initial design ideas Evaluating design ideas Modelling specific design ideas Modifying and presenting a final design idea Evaluating final idea against design specification	Planning for making Making a working prototype of the final design Using both traditional hand skills and CAM techniques and evaluating their effectiveness Critical evaluation the product and the process
DISCIPLINARY KNOWLEDGE	Brainstorming the problem Analysing existing products Interviewing the user Identifying important data Summarising the research Writing a detailed design specification	Sketching Formal 3D drawing techniques Annotating 2D and 3D sketches Developing virtual 3D computer-aided designs Developing physical 3D sketch models Presenting final design using formal drawing techniques and CAD	Flow charts Working properties of materials Selecting materials Measuring and marking out Forming/de-forming – cutting and shaping Joining – temporary and permanent Finishing – aesthetic and functional Evaluating and testing products Getting user feedback

			Suggesting further modifications
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