



## **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.

## **Y11 DESIGN AND TECHNOLOGY**

Pupils continue with their final GCSE design and make coursework project which counts for 50% of their final grade. They will also revisit and apply the key knowledge and skills developed over the 5 years.

YEAR 11			
Theme	Designing in Design and Technology Developing and Making in Design and Technology	Evaluating and Testing in Design and Technology	EXAM PREPARATION
SUBSTANTIVE KNOWLEDGE	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 a wider range of materials, tools and techniques	Critical evaluation the product and the process Feedback from the User Presenting all coursework evidence in final design portfolio	Pupils prepare for end of term exam which encapsulates both their core technical knowledge and their understanding of the design and making process they have just undertaken
DISCIPLINARY KNOWLEDGE	Informal and formal 3D drawing techniques Annotating 2D and 3D sketches Developing virtual 3D computer-aided designs Developing physical 3D sketch models Presenting final design using rendered drawings and CAD Flow charts – gantt charts Working properties of materials Stock forms and bought components Measuring and marking out Forming/de-forming – cutting and shaping	Evaluating and testing products Getting user feedback Planning further modifications	<ul> <li>Pupils prepare to sit an exam on their core technical knowledge and their understanding of the modern design process</li> <li>Focus on one material area for in-depth knowledge and understanding</li> </ul>

We aim to provide students with a curriculum that educates the whole child, creating responsible and respectful citizens. Through the development of substantive and disciplinary knowledge students are given the tools that allow them to achieve excellence and be ready for life.

