

# Y7 DESIGN AND TECHNOLOGY



## 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.

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Throughout the year pupils at Yardleys will experience a DT curriculum that will introduce them to the core aspects of product design and making. They will develop their understanding of nutrition and basic food preparation skills and develop the technical awareness and understanding of electronics within a systems and Control unit of work.

## YEAR 7

Theme	<i>"Designing for People"</i>	<i>"Design Development"</i>	<i>"Production and Industry"</i>	<i>"Making 1 and Making 2"</i>	<i>"Food, Cooking and Nutrition"</i>	<i>"Systems and Control"</i>
<b>SUBSTANTIVE KNOWLEDGE</b>	User Needs Research Creativity/Inspiration	Presenting Ideas CAD Sustainability 1	Industrial Practices CAM/CNC Health and Safety Planning	Materials: Classifying Materials Selecting Materials Testing Materials Stock items/bought components CAM	Healthy eating and nutrition Properties of ingredients Choosing ingredients Processing ingredients	Components Input-Process-Output Sensors Manufacture
<b>DISCIPLINARY KNOWLEDGE</b>	User Profile ACCESS FM Product Analysis Evaluation of Research Design Specification	Be, Do and Have Sketching/Crating 2D CAD Sustainability - 6R's Evaluation of Design	Scales of Production One-off/Batch/Mass Quality Control Accuracy	Tools and Processes Measuring and Marking Forming/De-forming Joining – temporary and permanent Finishing Evaluation of Final Product	Additives Planning a meal Cooking Methods Cooking Equipment Evaluation	Names and uses of components Soldering Health and Safety Testing Evaluation