

Yardleys Curriculum Aims

- To achieve academic excellence
- To educate the 'whole child' so they are ready for life
- To work collaboratively and ethically to provide education of the highest standard

DESIGN and TECHNOLOGY – KEY STAGE 3

Curriculum Overview

INTENT: Technology is a fast-moving and ever-evolving field of study and industry. Furthermore, throughout history its role has always been hugely impactful in shaping lives and society (and history itself), and that has never been more true than at present in the 21st Century, arguably the Age of Technology. The intent at Yardleys is for students to develop a base of knowledge from which to understand and contribute to this Age. This will be founded on the key concepts of design, make and evaluate with students gaining experience of a range of technologies and using these to solve problems and met the needs of users in modern society. More specifically, these concepts are comprised of six stages that form the structure of each SoW (see page 3 below); the structure is also project-based with the project for each SoW 'inspired by industry', replicating processes experienced by real companies, designers, manufacturers, etc. Furthermore, as such, there is an emphasis on working in (design) teams and collaboration (which should be seen as underpinning disciplinary knowledge).

Year 7

Students begin in Year 7 with a project for [Mindful Chef](#), an online recipe box company with a mission to make healthy eating easier. Students will be tasked with designing, making and advertising a new recipe box for a target user.

Mindful Chef – The Future of Recipe Boxes

Design

Make

SUBSTANTIVE KNOWLEDGE

- Role of Creative Designer
- Market:
 - Definition and components of
 - Research (of competitor products)
 - Persona database

- Prototype: what and why
- CAM: definition of
- Laser printer and printing

	<ul style="list-style-type: none"> ○ Target market ○ Market penetration ○ Fair Trade; British Made; Grow Local ● Project outline > design brief > design specification (and ACCESSFM) ● ACCESSFM: an introduction ● Sustainability <ul style="list-style-type: none"> ○ Definition of ○ 6Rs > links to UCD ○ Carbon footprint ● Materials: an introduction ● Maths: <ul style="list-style-type: none"> ○ Shape: 2D; 3D; height, length, depth; cube and cuboid > trapezium and trapezoid 	
DISCIPLINARY KNOWLEDGE	<ul style="list-style-type: none"> ● Maths: <ul style="list-style-type: none"> ○ Calculation of surface area and volume ○ Conceptualising size ● Drawing: <ul style="list-style-type: none"> ○ Use of drawing boards ○ Sketch ○ Isometric ○ Nets ○ Orthographic Projection ● CAD: <ul style="list-style-type: none"> ○ Definition of > advantages and disadvantages ○ introductory use of Techsoft to draw by computer the above ● Introductory use of PowerPoint 	
Evaluation		

Six stages underpinned by the key concepts of design, make and evaluate (with evaluation running throughout the process):

