Department: Design & Technology	Year 10

Plan Of Learning For The Year (Unit/Topic/Project Context)

Half Term 1:
- GCSE examination content – Product sustainability/ social issues/ products in society/ Technology push & Market pull. Puzzle projects.

Half Term 2
- GCSE examination content – Properties of materials/ material types (woods/ metals/ polymers/ textiles/ paper & board). Clock project.

Half Term 3
- GCSE examination content – Developments in new materials/ SMART materials/ CAD/ CAM/ JIT manufacture/ production methods. Charity collection box project

Half Term 4
- GCSE examination content – Hand tools/ power tools/ shaping techniques/ moulding/ joining/ treatments and finishes. Chopping board project.

Half Term 5
- GCSE examination content - Mechanisms/ electronics/ stock forms/ standardised components/ assembly processes/ heat treatments. Chopping board project. Mini CAD project.

Half Term 6
- GCSE examination content – Ergonomics/anthropometrics/ looking at designers/ user needs/ market research/ product analysis/ design strategies/ inclusive design. Learning aid project.

Feedback, Retrieval & Assessment	Super curriculum opportunities / extra-curricular activities	Cultural Capital, SMSC, Careers and Futures
- Evaluations on all Design & Make tasks including self and peer assessment - On-going formative assessment during lessons by teacher - Student/ teacher one-to-one discussions - Half-termly teacher assessed tasks and formal assessment - Regular homework and quizzing	- Students can use a range of materials, tools and equipment to design and improve the world around them. - To use a range of strategies to think and design creatively when faced with problems and challenges. - Students can make informed choices as consumers of products and technology. - To evaluate and understand the key principles of design and the impact design and technology has on society.	- Learning about other cultures and approaches - Learning about society - past and present - Working independently, in pairs and in groups. - Understanding the role of individuals in a team - Inclusivity in designing to accommodate all members of society - Exploring potential career paths and academic options in Design/ Engineering

Common misconceptions	Connecting New Knowledge	Challenge for all
- GCSE Design 7 Technology is not 'Woodwork'. - The emphasis is on design NOT craft.	- Regular revisiting of core terminology/ vocabulary - Developing skills through active implementation - Applying existing understanding/ skills to new challenges - Extensive use of ICT in design and manufacture	- Core vocabulary lists and knowledge audits in each unit. - Regular use of scaffolds and structured practice - Clearly defined success criteria and use of student action to make progress - Stretch activities built into each lesson