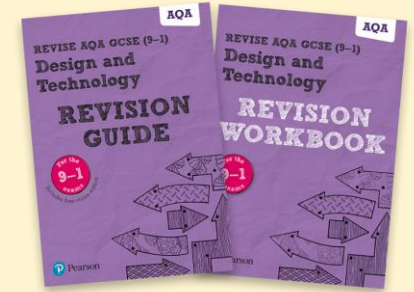
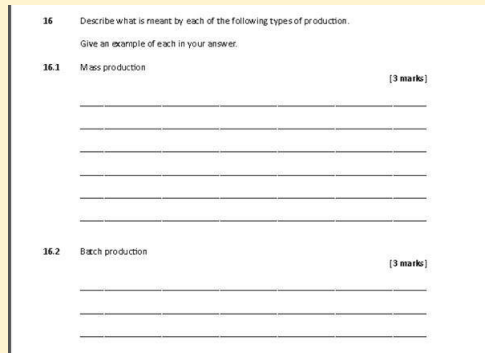
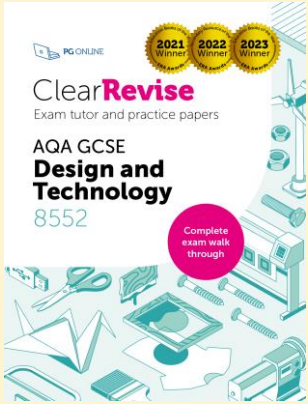


# WHAT DO WE STUDY IN DESIGN AND TECHNOLOGY AT GCSE?



## Y10 (Theory & practical skill development)

In the **first year**, students will be **studying the many aspects of the design and technological industry**.

Throughout theory lessons, we shall also have a **few practical sessions in order to develop design, machining and hand-making skills**.

The first year is **THEORY HEAVY** with a small percentage of skill building due to our KS3 skill-developing curriculum

- primary & secondary data
- environmental, social and economic challenge
- the work of others
- design strategies
- communication of design ideas

- selection of materials
- tolerances
- material management
- specialist tools and equipment
- specialist techniques and processes
- prototype development

## Y11 (Coursework & theory revision)

In June of the first year, students will **receive the brief for the coursework**. Y11 will be primarily spent **researching, designing, modelling and making a working prototype project**.

Alongside designing and making, students are **expected to be revising and putting core content from Y10 into practice**.

- new & emerging technologies
- energy generation and storage
- systems approach to designing
- mechanical devices
- materials and their working properties
- specialist techniques and processes
- surface treatments and finishes

- selection of materials
- forces and stresses
- ecological and social footprint
- sources and origins
- using and working with materials
- stock forms, types and sizes
- scales of production



# WHAT DOES THE COURSE INVOLVE?

The Wren has a top of the range, ever-developing workshop with facilities for metalwork and plastic, but specialises in woodwork.

In late June of Y10, students will receive the contextual challenge (brief) of what they can research and design around. Examples of previous years are:

- Eating Away from Home
- An educational toy or game
- Participating in Sport



# WHERE CAN DESIGN & TECHNOLOGY GCSE TAKE YOU?



## Key transferable skills:

Woodworking / Plastic moulding / Metal casting / Sketching techniques / Rapid prototyping and modelling / Research into primary and secondary data



## Typical career paths:

Carpenter / Product Designer / Industrial Designer / Graphic Designer / Design Engineer / Architect / Aeronautical Engineer / Material and construction manager

# FOR FURTHER INFORMATION OR QUESTIONS

- For further information, please discuss during the break tonight, or with your child's Art or Tech teacher during **Progress Evening, Thursday 5<sup>th</sup> February**
- [emclean@wren.excalibur.org.uk](mailto:emclean@wren.excalibur.org.uk)



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