

AQA GCSE D&T PRODUCT DESIGN

Year 10 –Summer Term

Theory Content. These relates directly to the knowledge required in both the examination and to help students make informed judgement when completing their Controlled Assessment next summer.

Materials and Processes – further learning related to properties, sourcing, application and sustainability. This includes carbon Fibre Composites, metals, plastics, woods, smart materials and modern materials. Impact of material selection on performance and the environment. Metals Commercial Production Methods.

Trip Trap Chair Product Analysis Student will complete a detailed evaluation of this chair that is designed for users with physical and/or developmental disabilities.

Ergonomics and Anthropometrics Students will be introduced to the key concepts of this topic and its importance in design. They will undertake an evaluation of their own home kitchen and range of other products we use every day.

Patents, registered designs, copyright, international standard and European legislation rights. Learners will explore how design can be protected intellectually and commercially. Case studies will be introduced that illustrate this technical topic.

Type of research Techniques. Students will discuss and be introduced to research techniques used in design practice and help prepare them for the NEA assignment after June 1st.

Non Exam Assessment Project . On June 1st AQA will release the project theme for that year. Students will be fully briefed in the process and folio formats so that they can excel. Within the theme students identify a need of their own selection and this ensures projects are highly personalised.

This project is 50% of the final grade marks.

After June 1st students focus on completing the research and analysis section of their project using the skills of analysis. Students will be expected to undertake research of the topic out of college and in class.

The Research Section should include:

- Clear and detailed Problem Statement
- Mind Map of the Context opportunities.
- Online Study Summaries validating the project is worth addressing.
- An extended client interview with questions and response and photo evidence of event.
- Primary Source Testing or Recording existing products, and consequent evaluation using ACCESS FM.
- Themeboard of online existing products with analysis and impact assessment.
- Research Materials collected and analysed that are primary or secondary that are unique to their project.
- Site analysis of where the design will be used and users.

They Could Also Include:

- Investigations in to users' needs and preference.
- Interviews with specialists and professionals who could give insights.
- Research new material technologies that could be utilised.

Recommended online resources:

<https://www.technologystudent.com/> Online resource providing resources, example test papers, animations, videos and teaching. Specifically aimed at the AQA syllabus.

<https://www.bbc.co.uk/bitesize/subjects/zvg4d2p> Learning and revision website that links to all D&T exam boards.