

SUBJECT: Design Technology

YEAR GROUP:10

Overview:

The new GCSE places greater emphasis on understanding and applying iterative design processes. Students will use their creativity and imagination to design and make prototypes that solve real and relevant problems, considering their own and others' needs, wants and values.

Students will gain awareness and learn from wider influences on Design and Technology including historical, social, cultural, environmental and economic factors. Students will get the opportunity to work creatively when designing and making and apply technical and practical expertise.

The GCSE will allow students to study core technical, designing, and making principles, including a broad range of design processes, materials techniques and equipment. They will also have the opportunity to study specialist technical principles in greater depth.

They will complete a mixture of mini projects alongside constructing a pretend GCSE mini project. They will receive a mixture of theory tasks to complete for homework. Some based on design and some based on the theory. At the end of each term, they will receive a mini exam to review progress achieved.



PROGRAMME OF STUDY

METHOD OF ASSESSMENT

During this year Design Technology students will:

- Understand the impact of new and emerging technologies on contemporary and potential future scenarios in relation to the following areas:
- Understand how energy is generated and stored and how it is used as the basis for the selection of products and power systems.
- Be taught about the developments in new materials.
- Asked to consider electronic systems including programmable components to provide functionality to products and processes, and enhance and customise their operation
- Know and understand the categorisation of the types and properties of the following materials.
- Understand the working and physical properties of the materials
- Understand the sources and origins of materials.
- Understand the different stock forms types and sizes in order to calculate and determine the quantity of materials or components required.
- Be able to select materials and components considering scales of production

- Completion of work in individual subject booklet
- Class discussions
- Self and peer marking
- Reviewing knowledge and skills acquired during the term
- Successful outcome of practical work from following step-by-step instructions given by the teacher
- Teacher feedback and self-evaluation of pupils work identifying successes and targets for improvement
- Weekly homework monitoring
- Mid-term and end of term assessments

