

Subject: Design & Technology Year 7 Ability All

Term / Date(s)	HT 1	HT2	HT3
Topic	Understanding safety through practical outcomes The ball bearing game	The importance of the design Process	Technical knowledge: An introduction to mechanisms, structures and simple electronic circuits
Topic overview	How to conduct themselves safely in a workshop.	How to use the design process in order to produce simple products in the workshop.	How to identify a specific mechanism and recognise its key parts.
Pupils will learn...	How to gather simple research in order to improve the products we use. How to become confident using a range of tools for marking out, drilling and shaping.	How to sketch in order to convey an idea or concept. How to model an idea through a variety of media with an introduction to CAD/CAM.	How to use structures to create stability and strength. How to identify simple electronic components in order to explain their function within an electronic circuit.

Subject: Design & Technology Year 8 Ability Mixed

Term / Date(s)	HT1	HT2	HT3
Topic	A safe practical outcome: Modelling an ergonomic pen	Sustainable design - Our Ecological footprint (night light)	Technical knowledge: Understanding the design process – Zip its
Topic overview	How to analyse, design and manufacture products fit for purpose.	How designers and consumers have an obligation to help the environment for future generations.	How industry use specialist tools, equipment, techniques and processes including CAD/ CAM to manufacture products in volume.
Pupils will learn...	How to improve the functionality of a product. How to develop sketches based on gathered research and analysis.	How electronic components function individually and as part of an electronic system. How to develop technical & practical skills needed to perform workshop tasks confidently and with some accuracy.	Why different manufacturing methods are used for different production volumes including the use of jigs and templates. How CAD packages can improve the quality of design.

Subject: Design & Technology Year 9 Ability Mixed

Term / Date(s)	HT1	HT2	HT3
Topic	Assessing risks through practical outcomes: Pewter casting / steel dip coated coat hook.	Sustainable working: Architectural graphic communication	Technical knowledge: Developing practical knowledge through the manufacture of a jewellery box
Topic overview	How to categorize and level potential risks and suggest suitable control measures so a detailed risk assessment can be produced for a range of practical outcomes.	How companies have an obligation to contribute to improving the societies we live in.	How to develop technical & practical skills further in order to produce high quality outcomes to a tolerance.
Pupils will learn...	How to develop technical & practical skills further in order to produce quality outcomes with accuracy and skill. About the importance of design and how it can influence consumer choice. (Package design).	How designs are influenced by client needs and external constraints. How developed sketches can be turned into high quality professional working drawings using CAD packages.	How to produce high quality scaled working drawings that can be used to produce an accurate practical outcome.

Please note: Please note students spend three half terms in DT and then move to Food Technology