Year 9 Curriculum Overview

Design & Technology

Term	Theory	Practical
Autumn 1	**New and Emerging Technologies** Digital Revolution Automation Finite / Non-Finite Materials Being a responsible designer Life Cycle Assessment	**Clocks** **Design and Make a new clock which would be suitable for sale in the London Design Museum** ACCESS FM – Design Specifications Understanding Art Movements Research Initial Sketches CAD – Computer Aided Design
Autumn 2	**New and Emerging Technologies - *Continued*** Technology Push / Market Pull Fashion and Trends Culture in Design CAD / CAM Just in Time ordering systems	**Clocks – *Continued*** CAM – Computer Aided Manufacturing Finishing Techniques **Christmas Decorations** Design and Make your own family Christmas decoration
Spring 1	**Energy, Materials and Systems** Where does energy come from? Fracking Renewable Energy Systems Forms of Energy Cells and Batteries	**Make Anything** **Design and Make anything you want from a small supply of recycled / scrap material** Research Design Principles Making Principles
Spring 2	**Energy, Materials and Systems** Smart Materials Modern Materials Inputs and Outputs Types of Motion Levers Linkages CAMS and Followers Gear Trains Block and Tackle Systems	**Movement Board** **Design and Make a movement board which demonstrates your understanding in a range of different movement types** Types of Motion Levers Linkages CAMS and Followers Gear Trains Block and Tackle Systems
Summer 1	**Materials** Paper and Board Timber Polymers Metals and Alloys Textiles	**Board Games** **Design and Make a brand new board game of your choice with a theme of your choice** Research – Existing Products ACCESS FM – Analysing Products Initial Design Ideas Designing Principles
Summer 2	**End of year Assessment** Revision Sessions Creating Revision Material End of Year Test	**Board Games - *Continued*** Making Principle Evaluation – Self and Client **Isosketch** **This is an introduction to 3D sketching and designing using a specific drawing tool called 'Isosketch'** Crating Basic Shapes Joining Shapes Shapes to Products 3D Shape Board