

Design Technology Curriculum Overview - Year 10

	Unit	Details
Autumn One	Biomimicry Light	Pupils will investigate and develop a further understanding of mechanisms, electrical systems and timber properties and uses. Pupils will use a range of communication strategies to design a Light based on an animal of their choice. Iterative design process is explored through ongoing model and mechanism tests and evaluations until the final design has been established. Pupils will be using the iterative design process to model, test and evaluate mechanisms, materials, shapes and joints until they have secured their final design. Pupils will further develop their understanding of timber joints and processes, using tools and machinery confidently and safely to create a successful and high-quality outcome. Pupils will apply their knowledge of electrical systems in carefully designing and making the circuit needed for their light. Pupils will Evaluate and test their product developing the skills to critique and refine their own ideas whilst designing and making.
Autumn Two		
Spring One	Exam Content	Pupils will focus on the exam content of the AQA Design and Technology GCSE covering the three main categories; Core technical principles, specialist technical principles and designing and making principles.
Spring Two	Toys that Teach (Mock NEA)	Pupils will be given a practice NEA which we will work through together as a class, allowing students to understand the coursework in more detail, receive guidance and structure before being able to complete their NEA independently in the summer term two. Pupils will receive a context to explore and analyse, create their own problem, design brief and specification to work on. Pupils will also be covering exam content focusing on designing and making principles.
Summer One		Pupils will further research their chosen design problem, creating initial design ideas and selecting one to develop further into a final design and manufacturing specification. Pupils will receive ongoing feedback and develop the confidence to independently approach the GCSE NEA. Pupils will also be covering exam content focusing on designing and making principles.
Summer Two	GCSE AQA NEA	Pupils will be given a choice of 3 contexts from AQA and will select one to begin to investigate for their GCSE NEA project. Pupils will work independently and will focus on section A01, Identifying & Investigating Design Possibilities, developing the following pages; Context analysis, Client profile and Work of others.