Curriculum Overview	Subject: DESIGN TECHNOLOGY – Product Design Year Group: 10			Examination Board: Edexcel Revision Guide	
When?	**What?**	**Why?**	**How?**	**Assessment / homework?**	**Support?**
Autumn Half Term 1	**Passive Amp project** Students are creating a passive amp for a phone	To develop further understanding of the design process ● Research ● Design ● Develop ● Manufacture ● Evaluate Learn about materials linked to the product Understand the work of other professional designers Understand design movements Working with hand tools and CAD/CAM processes	The strategies, techniques and approaches employed when investigating and analysing the work of past and present professionals and companies in order to inform design based on key criteria such as form, function, client, user and performance requirements, materials and components, scale of production and costs, sustainability, aesthetics, marketability and innovation. Design movement research to gain inspiration for ideas	Whole class feedback, one to one learning conversations. A mix of Google Classroom tasks and worksheets. In the situation where this is the first project for students in Y10 homework will be based upon Key Knowledge from their last project in Y9.	A useful website for students studying Design & Technology is called 'Technology Student.com'. Students should type into their browser the website name and then the particular area of Design & Technology they require e.g. technology student – two-point perspective. GCSE Bitesize (Edexcel)
Autumn Half Term 2	**Passive Amp project continued**	All Year 10 projects are designed to build on prior learning from KS3 and develop further skills for when they start the NEA in June the following year.	The categorisation of the types, properties and structure of timbers, man-made boards and polymers. To apply knowledge and understanding of working properties, characteristics, applications, advantages and disadvantages of man-made boards, natural timbers and polymers. Hand making and CAD/CAM – use of 2D Design to develop	Silent starters at the beginning of lessons, whole class feedback, one to one learning conversations, Q&A throughout. A mix of Google Classroom tasks and worksheets. In the situation where this is the first project for students in Y10 homework will be based upon Key Knowledge from their last project in Y9.	

			ideas and produce the product using the laser cutters		
Spring Half Term 1	**Birdfeeder Challenge**	This project focuses on research / product analysis, design skills and 3d modelling skills.	Students will research a range of birdhouse/bird feeders and carry out analysis of existing products using set criteria. They will then design and build a creative model through trials and testing of a range of modelling materials to create a final model.	Whole class feedback, one to one learning conversations. A mix of Google Classroom tasks and worksheets. In the situation where this is the first project for students in Y10 homework will be based upon Key Knowledge from their last project in Y9.	
Spring Half Term 2	**NEA begins** Students will be given pre-release material from the exam board (Edexcel) consisting of a range of design contexts	The NEA (Non Examined Assessment) is the final major project which will take students through Year 11. All further information on this can found in the prospectus.			
Summer Half Term 1	**NEA Part 1** Investigating Design Possibilities				
Summer Half Term 2	**NEA Part 1** Investigating Design Possibilities				