

Year 10	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<p>Content:</p> <p>Knowledge:</p>	<p>Theory Lessons Unit 1 - New 7 Emerging Technology</p> <ul style="list-style-type: none"> Industry e.g. automation Enterprise e.g. crowdfunding Social & environmental responsibility Production Techniques <p>Design Project Work Children's Learning & Play Practice NEA:</p> <ul style="list-style-type: none"> Primary & Secondary Research Ergonomics & Anthropometrics Iterative Process <p><i>Prior knowledge from ks3 units: knowledge of the design cycle and the stages involved in researching; product analysis & mood boards.</i></p>	<p>Theory Lessons Unit 4 - Specialist Knowledge: Papers & Boards</p> <ul style="list-style-type: none"> Sources & Origins Working with papers & boards; tools and processes Environmental & social impact <p>Design Project Work Children's Learning & Play Practice NEA:</p> <ul style="list-style-type: none"> Client Analysis & Profile Identifying design possibilities How to write a design brief & specification <p><i>Prior knowledge from ks3 units: knowledge of the design cycle and the stages involved in researching; writing questionnaires & design specifications</i></p>	<p>Theory Lessons Unit 4 - Specialist Knowledge: Papers & Boards</p> <ul style="list-style-type: none"> Properties & uses of Paper & Boards Stock forms Scales of Production <p>Design Project Work Children's Learning & Play Practice NEA:</p> <ul style="list-style-type: none"> Learning about different design strategies used to produce innovative ideas. Development and modelling techniques Research the social & economic issues related to products <p><i>Prior knowledge from ks3 units: drawing and design skills.</i></p>	<p>Theory Lessons Unit 4 - Specialist Knowledge: Papers & Boards</p> <ul style="list-style-type: none"> Stages of printing & finishing Commercial printing processes Bonding Unit 4 Test <p>Design Project Work Children's Learning & Play Practice NEA:</p> <ul style="list-style-type: none"> How to plan for manufacture Materials research Producing working drawings & cutting lists <p><i>Prior knowledge from ks3 units: knowledge of materials, joining methods and practical processes.</i></p>	<p>Theory Lessons Unit 5 - Specialist Knowledge: Polymers</p> <ul style="list-style-type: none"> Sources & Environmental factors. Properties & uses Stock Forms Industrial Processes <p>Design Project Work Children's Learning & Play Practice NEA:</p> <ul style="list-style-type: none"> The tools and processes used in manufacturing a final product <p><i>Prior knowledge from ks3 units: knowledge of materials, joining methods and practical processes.</i></p>	<p>Theory Lessons Unit 5 - Specialist Knowledge: Polymers</p> <ul style="list-style-type: none"> Selection of materials forces & stresses End of unit 5 test <p>Design Project Work Children's Learning & Play Practice NEA:</p> <ul style="list-style-type: none"> Evaluation & testing of products <p>Yr10 Mock Exams Full 2hr paper assessing all areas of theory</p> <p>GCSE NEA Contexts for the NEA (Non-Examined Assessment) are released for students to research and review over the summer.</p> <p><i>Prior knowledge from ks3 units: evaluation & research skills.</i></p>
<p>Skills</p> <p>Recall of knowledge and skills will be interleaved throughout the SOW</p>	<ul style="list-style-type: none"> Recall techniques and how to apply theory knowledge to exam questions Research & Investigation skills; how to analyse and select useful information. 	<ul style="list-style-type: none"> Recall techniques and how to apply theory knowledge to exam questions Research & Investigation skills; how to analyse and select useful information. 	<ul style="list-style-type: none"> Recall techniques and how to apply theory knowledge to exam questions Drawing skills using both 2D & 3D drawing techniques Research & Investigation skills; how to analyse and 	<ul style="list-style-type: none"> Recall techniques and how to apply theory knowledge to exam questions Drawing skills using both 2D & 3D drawing techniques Research & Investigation skills; how to analyse and 	<ul style="list-style-type: none"> Recall techniques and how to apply theory knowledge to exam questions Practical Skills, safe and skillful use of tools and processes 	<ul style="list-style-type: none"> Recall techniques and how to apply theory knowledge to exam questions How to structure evaluations Research & Investigation skills; how to analyse and select useful

			select useful information.	select useful information.		information.
Key Question	<ul style="list-style-type: none"> What is the impact of new and emerging technology on the design & manufacturing industry? What is the iterative process and why is it so important? 	<ul style="list-style-type: none"> What is a life cycle assessment and why do designers need to use them? How does the brief and specification inform the design? 	<ul style="list-style-type: none"> What tools. Equipment and processes are used in the production of wooden products? What are the different design strategies and how are they used to produce innovative ideas? 	<ul style="list-style-type: none"> Why does the volume of a product influence the way it is made? Why is planning an essential part of the manufacturing process? 	<ul style="list-style-type: none"> Where do polymers come from, how are they produced? What is the impact of polymers on the environment? How do we use the laser cutter? 	<ul style="list-style-type: none"> How are materials selected for use? What is the NEA and how does it effect my final grade?
Assessment	<ul style="list-style-type: none"> Theory worksheets & practice exam questions (self & teacher assessment). End of Unit Test (Teacher assessed) Assessment of design project work using the AQA NEA assessment criteria(self & teacher assessment). 	<ul style="list-style-type: none"> Theory worksheets & practice exam questions (self & teacher assessment). Assessment of design project work using the AQA NEA assessment criteria(self & teacher assessment). 	<ul style="list-style-type: none"> Theory worksheets & practice exam questions (self & teacher assessment). Assessment of design project work using the AQA NEA assessment criteria(self & teacher assessment). 	<ul style="list-style-type: none"> Theory worksheets & practice exam questions (self & teacher assessment). End of Unit Test (Teacher assessed) Assessment of design project work using the AQA NEA assessment criteria(self & teacher assessment). 	<ul style="list-style-type: none"> Theory worksheets & practice exam questions (self & teacher assessment). Assessment of design project work using the AQA NEA assessment criteria(self & teacher assessment). 	<ul style="list-style-type: none"> End of Unit Theory Test (Teacher assessed) Yr10 full mock exam (teacher assessed) Assessment of design project work using the AQA NEA assessment criteria(self & teacher assessment).
Literacy/numeracy/SMSC/Character	<ul style="list-style-type: none"> Glossary of key words produced to help understand technical terms How to analyse data and summarise in a paragraph using the PEEL structure. Analysing data, bell curves and percentiles in anthropometric data. 	<ul style="list-style-type: none"> How to structure more extended exam questions Analysis of questionnaire data, the types and production of a range of graphs. Researching and understanding the needs and wants of a specific customer. 	<ul style="list-style-type: none"> Measuring & scale used in the production of models Research into the social and economic impact their design many have. 	<ul style="list-style-type: none"> Producing technical drawings to scale and with accurate measurements Producing an accurate cutting list with the precise measurements of all materials required. 	<ul style="list-style-type: none"> Accurate measuring skills through practical work. Calculation of quantities of materials and sizes through stock forms. Geometry & trigonometry through calculating material sizes from stock forms Tessellation 	<ul style="list-style-type: none"> Practicing extended writing through evaluation and how to structure an evaluation. Math skills assessed through the end of unit & year test.
Enrichment opportunities	Weekly NEA drop-in sessions to support coursework.	Weekly NEA drop-in sessions to support coursework.	Weekly NEA drop-in sessions to support coursework.	Trip & workshop at the Design Museum. Weekly NEA drop-in sessions to	Weekly NEA drop-in sessions to support coursework.	Weekly NEA drop-in sessions to support coursework.

and futures				support coursework.			
YEAR 11	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2	
Content	<p><u>Theory Lessons</u> Revision:</p> <ul style="list-style-type: none"> Unit 1 Unit 2 Unit 3 <p><u>NEA</u> Students select a context and through the design process, produce their own product.</p> <ul style="list-style-type: none"> Investigation & Research Design Brief Specification 	<p><u>Theory Lessons</u> Revision:</p> <ul style="list-style-type: none"> Unit 4: Timbers Unit 5: Polymers Mock exam technique <p><u>NEA</u> Students select a context and through the design process, produce their own product.</p> <ul style="list-style-type: none"> Design Ideas Design Development & modelling 	<p><u>Theory Lessons</u> Revision:</p> <ul style="list-style-type: none"> Unit 6: Design & Make Theory Technical Drawing <p><u>NEA</u> Students select a context and through the design process, produce their own product.</p> <ul style="list-style-type: none"> Planning for manufacture Materials research Producing working drawings & cutting lists 	<p><u>Theory Lessons</u> Revision:</p> <ul style="list-style-type: none"> Students & Teachers to identify areas of weakness and review the theory units again <p><u>NEA</u> Students select a context and through the design process, produce their own product.</p> <ul style="list-style-type: none"> Manufacture of products Final Evaluation 	<p><u>Theory Lessons</u> Revision:</p> <ul style="list-style-type: none"> Feedback from mocks. Revision dependent on feedback. <p><u>NEA</u> Final NEA deadline - 1st week after Easter Holidays.</p>		
Skills	<ul style="list-style-type: none"> Recall techniques and how to apply theory knowledge to exam questions Research & Investigation skills; how to analyse and select useful information. 	<ul style="list-style-type: none"> Recall techniques and how to apply theory knowledge to exam questions Drawing & design skills 	<ul style="list-style-type: none"> Recall techniques and how to apply theory knowledge to exam questions Drawing skills using both 2D & 3D drawing techniques Planning skills 	<ul style="list-style-type: none"> Recall techniques and how to apply theory knowledge to exam questions Practical Skills, safe and skillful use of tools and processes 	<ul style="list-style-type: none"> Recall techniques and how to apply theory knowledge to exam questions Exam technique 		
Key Question	<ul style="list-style-type: none"> How does Section A look on the exam, what is the content, and how do I make the most of it? How much is section A worth? What revision techniques should I be using for Section A? 	<ul style="list-style-type: none"> How does Section B look on the exam, what is the content, and how do I make the most of it? How much is section B worth? What do I need to do if a question asks me to use notes and sketches in my answer? 	<ul style="list-style-type: none"> How does Section C look on the exam, what is the content, and how do I make the most of it? How much is section C worth? What revision techniques should I be using for Section C? 	<ul style="list-style-type: none"> What areas of revision should I focus on? What revision techniques should I be using? 	<ul style="list-style-type: none"> What areas of revision should I focus on? What revision techniques should I be using? 		

Assessment	<ul style="list-style-type: none"> • Revision worksheets & practice exam questions (self & teacher assessment). • Assessment of design project work using the AQA NEA assessment criteria(self assessment). 	<ul style="list-style-type: none"> • Mock exam - full 2hr paper (teacher assessment) • Assessment of design project work using the AQA NEA assessment criteria(self assessment). 	<ul style="list-style-type: none"> • Revision worksheets & practice exam questions (self & teacher assessment). • Assessment of design project work using the AQA NEA assessment criteria(self assessment). 	<ul style="list-style-type: none"> • Revision worksheets & practice exam questions (self & teacher assessment). • Assessment of design project work using the AQA NEA assessment criteria(self assessment). 	<ul style="list-style-type: none"> • Revision worksheets & practice exam questions (self & teacher assessment). • Final teacher assessment of NEA then sent to be externally moderated. 	
Literacy/numeracy/SMSC/Character	<ul style="list-style-type: none"> • Use of key technical vocabulary supported by glossaries • Raised awareness of SMSC issues through research into potential clients and products. 	<ul style="list-style-type: none"> • Exam technique; how to structure 10 mark questions. 	<ul style="list-style-type: none"> • Maths revision through design & make theory covering, handling data, graphs, geometry, trigonometry , measuring, area, volume, scale & ratio. 	<ul style="list-style-type: none"> • Use of key technical vocabulary supported by glossaries • Exam technique; paragraph structure 	<ul style="list-style-type: none"> • Use of key technical vocabulary supported by glossaries • Exam technique; paragraph structure 	
Enrichment opportunities and futures	Weekly NEA drop-in sessions to support coursework.	Weekly NEA drop-in sessions to support coursework.	Weekly NEA drop-in sessions to support coursework.	Weekly NEA drop-in sessions to support coursework.	Weekly revision sessions after school. .	