

KS4 Product Design

Year 10	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Material manipulation and knowledge	<p>Material Focus: Paper, card and board</p> <p>Students learn to manipulate different materials and assess the properties and uses.</p>	<p>Material Focus: Timber based materials.</p> <p>Assessing materials and develop understanding into the product lifecycle. Cradle-2-grave.</p> <p>Students learn to manipulate different materials and assess the properties and uses.</p>	<p>Material Focus: Plastics</p> <p>Sustainability- Investigation into Crude oils and impact extrusion has on the earth.</p> <p>Students learn to manipulate different materials and assess the properties and uses.</p>	<p>Material Focus: ferrous and non ferrous metals</p> <p>Students learn to manipulate different materials and assess the properties and uses.</p> <p>practical task with cheap metal PEWTER and independent research developed to look at other metals.</p>	<p>Mini Design & make challenge (educational toy, USB stick, Skateboard project)</p> <p>Students learn to manipulate different materials and assess the properties and uses.</p>	<p>Mini Design and make challenge (educational toy, USB stick, Skateboard project)</p>
	AOs: 1, 2 & 3	AOs: 1,3	AOs: 1,2	AOs: 1,2	AOs: 1,2,3	AOs: 1,2,3
	<p>Assessment: Practical assessment 3D pop up card using various</p>	<p>Assessment: Practical assessment- joints and accuracy using reclaimed timbers.</p>	<p>Assessment: Practical assessment- manipulating plastics vacuum forming, laser cutting and hand tools.</p>	<p>Assessment: Practical assessment- pewter casting to create the mould and cast metal.</p>	<p>Assessment: outcome of final piece and folder</p>	<p>Assessment: outcome of final piece and folder</p>

	mediums					
Theory	EXAMPRO AQA - Writing a Design Brief & Spec question SECTION 1	Paper: EXAMPRO AQA Questions based on properties of materials - TIMBER, PAPER & BOARDS	Paper: EXAMPRO AQA Questions based on properties of materials- THERMOSETTING AND THERMO PLASTICS	Paper: EXAMPRO AQA Questions based on properties of materials- CASTING METALS AND SUSTAINABILITY	Paper: EXAMPRO AQA Questions- ERGONOMICS AND ANTHROPOMETRICS	Paper: EOY test on design test. Question paper SECTION 1 & 2
	AOs: 1 & 4	AOs: 1 & 4	AOs: 1 & 4	AOs: 1 & 4	AOs: 1 & 4	AOs: 1 & 4

Year 11	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1
Material manipulation and knowledge	Exam techniques <ul style="list-style-type: none"> • Time questions • Key terminology • Command words • Mark schemes 	Research into chosen brief: <ul style="list-style-type: none"> • Client profile • Shop research • Product analysis • Specification • Initial designs 	Controlled Assessment <ul style="list-style-type: none"> • Modelling • Final designs • Cutting list • <u>making</u> 	Controlled Assessment <ul style="list-style-type: none"> • Making • <u>evaluating</u> 	Theory <ul style="list-style-type: none"> • Manufactured board • Designing/ designing for a client • Writing specifications • Plastics • Design movements • Product analysis

	AOs:1,2 & 3	AOs: 1,3	AOs: 1,2	AOs: 1,2	AOs: 1,2,3
	Assessment: Mid term assessment	Assessment: PPEs	Assessment: Practical assessment- manipulating plastics vacuum forming, laser cutting and hand tools.	Assessment:outcome of final piece and folder	Assessment: Timed & Marked questions
Theory	EXAMPRO AQA - Writing a Design Brief & Spec question SECTION 1	Paper: EXAMPRO AQA Questions based on properties of materials - TIMBER, PAPER & BOARDS	Paper: EXAMPRO AQA Questions based on properties of materials- THERMOSETTING AND THERMOPLASTICS	Paper: EXAMPRO AQA Questions based on properties of materials- CASTING METALS AND SUSTAINABILITY	Paper: EXAMPRO AQA Questions- ERGONOMICS AND ANTHROPOMETRICS
	AOs:1& 4	AOs: 1 & 4	AOs: 1 & 4	AOs:1 & 4	AOs:1 & 4