



## Year 13 Design Technology – Product Design Curriculum Map

<b>Overview</b>	<p>A Level AQA Design and Technology - Product Design</p> <p>This creative and thought-provoking qualification gives students the practical skills, theoretical knowledge and confidence to succeed in a number of careers. Especially those in the creative industries. They will investigate historical, social, cultural, environmental and economic influences on design and technology, whilst enjoying opportunities to put their learning into practice by producing prototypes of their choice. Students will gain a real understanding of what it means to be a designer, alongside the knowledge and skills sought by higher education and employers.</p> <p>You can find out about all our Design and Technology: Product Design qualifications at <a href="http://aqa.org.uk/designandtechnology">aqa.org.uk/designandtechnology</a></p> <p>Theory resources endorsed through <a href="#">PGOnline</a></p>					
<b>Year 13</b>	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>Topic</b>	EXAM BOARD NEA	EXAM BOARD NEA	EXAM BOARD NEA	EXAM BOARD NEA	Exam Timetable	Exam Timetable
<b>Knowledge</b>	Units 1 -3 revisit  Identification and investigation of a design possibility  Investigation of needs and research  Specification	Units 4 - 7 revisit  Design ideas  Development of ideas	Units 8 -11 revisit  Development of Prototype  Review of development and final idea  Communication of design ideas	Units 12-13 revisit  Making:	Units 14 - 15 revisit  Testing and evaluation:	Exam Timetable  Revision as required
<b>Skills</b>	<b>Theory revision exam skills:</b>  Exam style questions / Papers  <b>Practical Skills:</b> <b>Exam board NEA</b>  <u>Identification and investigation of a</u>	<b>Theory revision exam skills</b>  Exam style questions / Papers  <b>Practical Skills:</b> <b>Exam board NEA</b>  <u>Design ideas:</u> Initial ideas	<b>Theory revision exam skills</b>  Exam style questions / Papers  <b>Practical Skills:</b> <b>Exam board NEA</b>  <u>Development of Prototype:</u>	<b>Theory revision exam skills</b>  Exam style questions / Papers  <b>Practical Skills:</b> <b>Exam board NEA</b>  <u>Making:</u> Quality Control,	<b>Theory revision exam skills</b>  Exam style questions / Papers  <b>Practical Skills:</b> <b>Exam board NEA</b>  <u>Testing and evaluation:</u>	Exam Timetable  Revision as required  Exam Timetable  Revision as required

	<p><b><u>design possibility:</u></b></p> <p>Situation/Problem</p> <p>Context &amp; Research Plan.</p> <p><b><u>Investigation of needs and research:</u></b></p> <p>Client Interview and Fly-on-the-wall Observation</p> <p>Existing Products Detailed product analysis Life cycle analysis Sustainability Location</p> <p>Further Research</p> <p><b><u>Specification:</u></b></p> <p>Specification</p>	<p>Review of chosen ideas</p> <p><b><u>Development of ideas:</u></b></p> <p>Scale Model planning to include sourcing of material 1:1 Model Testing Ergonomics and Anthropometrics Improved Chosen Idea Experimenting with materials, processes and applied finish Planning Development and experimentation CAD &amp; evaluation of Materials Development and experimentation alternative components and Materials Development and experimentation manufacturing processes in product Development and experimentation alternative methods of manufacture, Jigs, formers, and CAD CAM Surface Finish Experimentation Fully Developed Final Design Working drawing</p>	<p>Manufacturing Specification Production plan</p> <p><b><u>Review of development and final idea:</u></b></p> <p>All development pages - evaluation of the refinements made to designs with reference to user needs and specification</p> <p>All development pages – evaluation and analysis of the designs and prototypes made by others which make connection of elements and inform own design decisions</p> <p><b><u>Communication of design ideas:</u></b></p> <p>All developments pages use of traditional/manual graphical techniques, accomplished use of Written techniques and CAD</p>	<p>Quality Assurance, and standards Diary of making Product</p>	<p>Evaluation against the Design Specification Client Evaluation In Location Evaluation against the Manufacturing Specification Summary of Improvements and recommendations</p>	
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