

<i>Subject content</i>	<i>Boardworks presentations</i>
Unit 1: Written Paper	
Materials and Components	
Materials: metals, timber, plastics, composites, smart and nanomaterials	Plastics Metals Woods
Components, adhesives and applied finishes	Components Adhesives
Design and market influences	
Task analysis	Product Analysis
Research analysis	Product Analysis Social and Cultural Issues
Sustainability of design	
Designing	
Creativity	
Evaluation of ideas	Evaluation Techniques

AQA GCSE Design and Technology: Resistant Materials (2010)

Subject content	Boardworks presentations
Development of ideas	ICT in Resistant Materials
Planning for manufacture	ICT in Resistant Materials Industrial Practices
Selection of appropriate process and techniques for own product	Tools and Techniques
Evaluation of own product	Evaluation Techniques
Social, cultural, moral, environmental, sustainability, economic issues	Social and Cultural Issues Moral and Environmental Issues
Social and cultural influences on the consumer market	Social and Cultural Issues
Consumer choice	Social and Cultural Issues Product Analysis
Consumer rights legislation, product maintenance and codes of practice	

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Subject content	Boardworks presentations
Sustainability and environmental issues	Moral and Environmental Techniques
Moral, ethical and economical issues	Moral and Environmental Techniques Social and Cultural Techniques
Health and safety Issues	Health and Safety
Safety for the consumer	Health and Safety
Processes and manufacture	ICT in Resistant Materials
Techniques and processes	Tools and Techniques
Preparation	Tools and Techniques
Marking out	Tools and Techniques
Cutting	Tools and Techniques
Shaping	Tools and Techniques Manufacturing Processes
Forming and bending	Manufacturing Processes
Casting and moulding	Manufacturing Processes

Subject content	Boardworks presentations
Joining techniques	Tools and Techniques
Cleaning and finishing	Tools and Techniques
CAM systems	ICT in Resistant Materials
Systems and control	Systems and Control
Mechanical systems	Systems and Control
Electrical systems	
Quality control systems	Systems and Control
Information and communication technology	ICT in Resistant Materials
Computer technology and communication techniques	ICT in Resistant Materials
Use of CAD for graphical techniques	ICT in Resistant Materials

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Subject content	Boardworks presentations
Industrial use of CAD/CAM	Industrial Practices
Industrial practices	Industrial Practices
Manufacturing systems	Industrial Practices
Industrial and market awareness	Industrial Practices
Industrial systems for batch or volume production	Research Evaluation Techniques

<i>Stage</i>	<i>Subject content</i>	<i>Boardworks presentations</i>
	Unit 1 Creative Design and Make Activities	
1	Investigate	
1.1	Analysing the brief	Product Analysis
1.2	Research	Product Analysis
1.3	Specification	Evaluation Techniques
2	Design	
2.1	Initial ideas	Product Analysis
2.2	Review	
2.3	Communication	ICT in Resistant Materials
3	Develop	
3.1	Development	ICT in Resistant Materials Evaluation Techniques
3.2	Final design	
4	Plan	
4.1	Production plan	
5	Make	

Stage/ Topic	Subject content	Boardworks presentations
5.1	Quality of manufacture	Product Analysis ICT in Resistant Materials
5.2	Quality of outcome	Components
5.3	Health and safety	Health and Safety
6	Test and Evaluate	
6.1	Testing and evaluating	Evaluation Techniques
	Unit 2 Knowledge and Understanding of Graphics Products	
1	Materials and components	
1.1	Woods	Woods
1.2	Metals	Metals
1.3	Polymers	Plastics
1.4	Composites	Plastics
1.5	Modern and smart materials	

Stage/ Topic	Subject content	Boardworks presentations
2	Tools and Equipment	
2.1	Marking and measuring out	Tools and Techniques
2.2	Wasting	ICT in Graphics Products
3	Industrial and commercial processes	
3.1	Scale of production	Industrial Practices
3.2	Materials processing and forming	Plastics Metals Woods Tools and Techniques Manufacturing Processes
3.3	Joining methods	Tools and Techniques Components
3.4	Adhesives	Adhesives
3.5	Heat treatment	Metals
3.6	Finishing techniques	Tools and techniques

Stage/ Topic	Subject content	Boardworks presentations
3.7	Manufacturing processes for batch production	Industrial practices
3.8	Health and safety	Health and Safety
4	Analysing products	
4.1	Specification criteria	Evaluation techniques
4.2	Materials and components	Plastics Metals Woods Components Tools and Techniques
4.3	Manufacturing processes	Tools and Techniques Components Industrial Practices
5	Designing products	
5.1	Specification criteria	Evaluation techniques
5.2	Designing skills	Evaluation techniques ICT in Resistant Materials

Stage/ Topic	Subject content	Boardworks presentations
5.3	Application of knowledge and understanding	Industrial Practices
3.8	Health and safety	
6	Technology	
6.1	Information and communication technology (ICT)	ICT in Resistant Materials
6.2	Digital media and new technology	
6.3	Computer-aided design/Computer-aided manufacturing (CAD/CAM) technology	ICT in Resistant Materials
7	Sustainability	
7.1	Minimising waste production	Moral and Environmental Issues
7.2	Renewable sources of energy	Moral and Environmental Issues

<i>Stage/ Topic</i>	<i>Subject content</i>	<i>Boardworks presentations</i>
8	Ethical design and manufacture	
8.1	Moral, social and cultural Issues	Moral and Environmental Issues Social and Cultural Issues

Subject content	Boardworks presentations
Unit A561: Introduction to Design and Making	
Demonstrate creativity	ICT in Resistant Materials
Demonstrate designing skills	Evaluation Techniques ICT in Resistant Materials
Demonstrate good making skills	ICT in Resistant Materials Evaluation Techniques Tools and Techniques Manufacturing Processes
Demonstrate critical evaluation skills	Evaluation Techniques ICT in Resistant Materials
Unit A562: Sustainable Design	
The 6 Rs	Moral and Environmental Issues Industrial Practices
Product analysis and the design of products	Social and Cultural Issues Moral and Environmental Issues Product Analysis

Subject content	Boardworks presentations
Unit A563: Making Quality Products	
Develop and demonstrate designing skills	Evaluation Techniques ICT in Resistant Materials Tools and Techniques Manufacturing Processes Components
Demonstrate good making/workshop skills	Evaluation Techniques ICT in Resistant Materials Tools and Techniques Manufacturing Processes Components Health and Safety
Demonstrate critical evaluation skills	Evaluation Techniques
Unit A564: Technical Aspects of Designing and Making	
The general classification of resistant materials	Woods Metals Plastics
Performance characteristics of resistant materials	Woods Metals Plastics
The conversion or altering of resistant materials into other useable forms	Metals Plastics

Subject content	Boardworks presentations
The finishing processes applied to resistant materials to improve performance and appearance	Tools and Techniques
'Smart' and modern materials	
Form of materials and their selection	Metals Woods Plastics
Environmental and sustainability issues	Moral and Environmental Issues Industrial Practices
Pre-manufactured components	Components
Design	Product Analysis Evaluation Techniques
Product planning	ICT in Resistant Materials
Tools and equipment	Tools and Techniques
Processes	Industrial Practices Manufacturing Processes

Subject content	Boardworks presentations
Computer application	ICT in Resistant Materials
Industrial production	Industrial Practices ICT in Resistant Materials
Health and safety	Health and Safety
Quality	Product Analysis Evaluation Techniques
Product evaluation	Evaluation Techniques