

YEAR 10 GCSE RESISTANT MATERIALS REVISION INFORMATION FOR YEAR 10 EXAMINATION 2017

In addition to the context/theme for the examination which you should be researching:

GARDENING FOR THE ELDERLY

For the examination you will also need to revise the following key topics. The examination is 1 hour long but next year you will need to sit an exam for 2 hours. Use a highlighter pen to highlight which topics you feel less confident about and need to focus more of your time on when revising for the examination. RAG rate the topics - GREEN - SECURE KNOWLEDGE, AMBER - REASONABLY SECURE KNOWLEDGE BUT MORE NEEDED, RED - NEED TO KNOW A LOT MORE

Description of Topic	Pages in Text Book	Pages in Revision Guide
• Properties of materials.	10 & 11	38 & 39
• Where plastics come from.	20	45
• Names of different types of Thermoplastics and what they are used for.	20 & 21	44 & 45
• The properties and uses of Thermoplastics.	20 & 21	44 & 45
• Names of different metals and what they are used for.	17 - 19	42 & 43
• The properties and uses of metals and alloys.	18 & 19	40 & 41
• Names of different woods and manufactured boards and what they are used for.	12 - 16	46 & 47
• The properties and uses of wood and manufacture boards.	12 - 16	46 & 47
• Names of Composites, Smart Materials, and other New Materials	22 - 25	48 & 49
• Names and uses of different adhesives and safety issues associated with them.	36 & 37	52 & 53
• Names of processes and what health and safety issues are associated with them.	104 & 105	64
• General Health and Safety and Risk Assessments (COSHH)	106 & 107	65
• Sustainability and environmental issues - Sustainability and the effects of making products has on the environment.	26 & 27 70 & 71	4 & 5
• The 6Rs - Reduce, Recycle, Reuse, Refuse, Rethink, & Repair	74 & 75	63
• What moral, social and cultural issues influence the design of products.	66 - 69	62 & 63
• What the different fixtures and fixings are and how are they used.	28 - 31	50 & 51
• Different ways to join materials using components such screws, nuts and bolts, nails and rivets.	32 - 35	28, 29 & 33

Description of Topic	Pages in Text Book	Pages in Revision Guide
<ul style="list-style-type: none"> Different ways to join wood using wood joints. 	116 & 117	30 & 31
<ul style="list-style-type: none"> Different ways to permanently join metal. 	118 & 119	32 & 33
<ul style="list-style-type: none"> Ways to apply different finishes to materials. 	40 - 43	27, 41, 44, & 47
<ul style="list-style-type: none"> Ways to present ideas. Being able to present your ideas in the exam clearly. 	86 - 89	14 & 15
<ul style="list-style-type: none"> Know what the different hand tools are and name them. 	108 & 109	18
<ul style="list-style-type: none"> Know what machine and power tools are and be able to name them and what they are used for. 	110 - 112	19 - 21
<ul style="list-style-type: none"> Know how to mark out on different materials correctly and name tools used. 	113 - 115	19
<ul style="list-style-type: none"> Know what ways plastics can be formed (moulded) into shapes. Be able to name the processes. 	126 & 127	24 & 25
<ul style="list-style-type: none"> Know what the different scales of production are and what types of products would be made using them. 	130	66 & 67

As well as the Text book given to you use the pages from the Revision Guide given to you too. Also:

- Use of the *technologystudent.com* website where they have revision material specific to the theme of the examination - see Resistant Materials section on the website. This is normally an excellent place to help you.
- Use **BBC Bitesize** revision website.

Both are excellent revision resources for you to use.

Also use the AQA exam board website -AQA Design and Technology Resistant Materials Past Papers: <http://www.aqa.org.uk/subjects/design-and-technology/gcse/design-and-technology-resistant-materials-4560/past-papers-and-mark-schemes>

Remember:

- You cannot take any preparation material into the examination.
- You must take **colouring pencils and other drawing aids like compasses, rulers, rubbers, pens** etc. into the examination.
- Some** examination questions will not be covered by the theme of the exam paper. In other words, all the questions will not necessarily be about the theme, this is normally just Section A in the paper.

WARNING! WARNING! WARNING! WARNING! WARNING!

Merely logging on to web sites or flicking through pages of your text book will not guarantee success!

You **must** be prepared to put in a great deal of hard work in order to produce revision notes/cards etc and research into the exam theme. Use the revision tools/strategies shown and learnt at school.

Good Luck!