



Examination Preparation

In your summer examination you will find a question about a pre- released theme, this year it is **STACKING CHAIRS**

This revision pack will help you to prepare for both the longer answer 'design' questions and the question on the pre-released theme.

You need to complete the following 4 tasks:-

TASK 1

Look at the annotated model answer below for last Summer's pre-release themed question. You sat this paper for your mock exam and the theme was **garden hand tools**. Identify how and why the marks have been allocated by referring to the mark scheme. The answer is written in Black; the annotations in red refer to the mark scheme and indicate how and where the marks have been awarded. Below the exemplar question is an extract from the mark scheme that you should use.

- 5 This question is based on the theme of 'garden hand tools'.
Fig. 6 shows a pair of garden pruning shears.
The handles are adjustable in length.

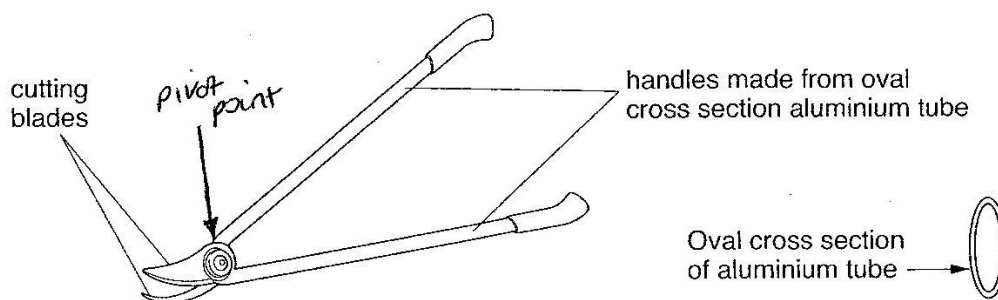


Fig. 6

- (a) On Fig. 6 label the pivot point. [1]

- (b) The handles are adjustable in length which increases and decreases the load on the cutting blades.

State whether the handles would need to be lengthened or shortened to **increase** the load on the cutting blades.

The handles would need to be *lengthened* [1]

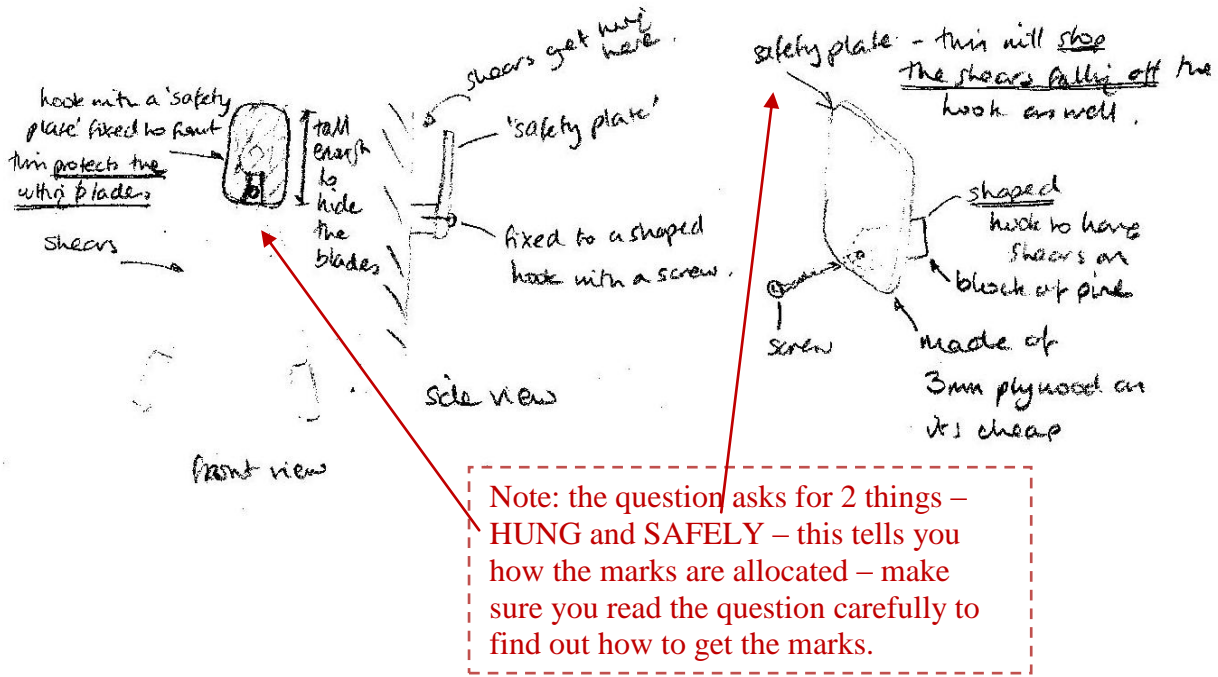
- (c) Give **two** different reasons why oval aluminium tube has been used to make the handles of the shears.

Reason 1 *Aluminium doesn't rot* [1]

Reason 2 *The tube is hollow so it is lighter in weight* [1]

TASK 1- CONTD

(d) Use sketches and notes to show how the shears could be hung safely on a wall.



[2]

Fig. 7 shows two sets of garden hand tools.

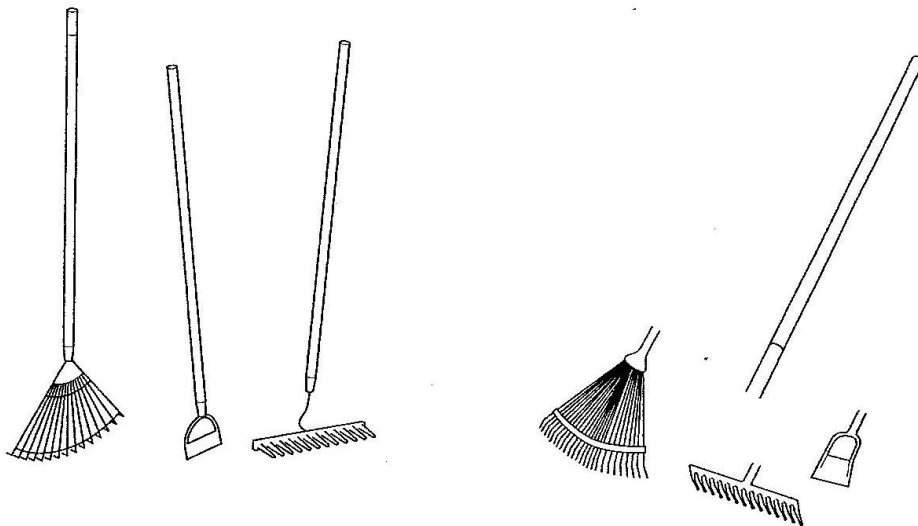


Fig. 7

(e) Garden hand tools can be purchased with fixed or interchangeable tool heads as shown in Fig. 7.

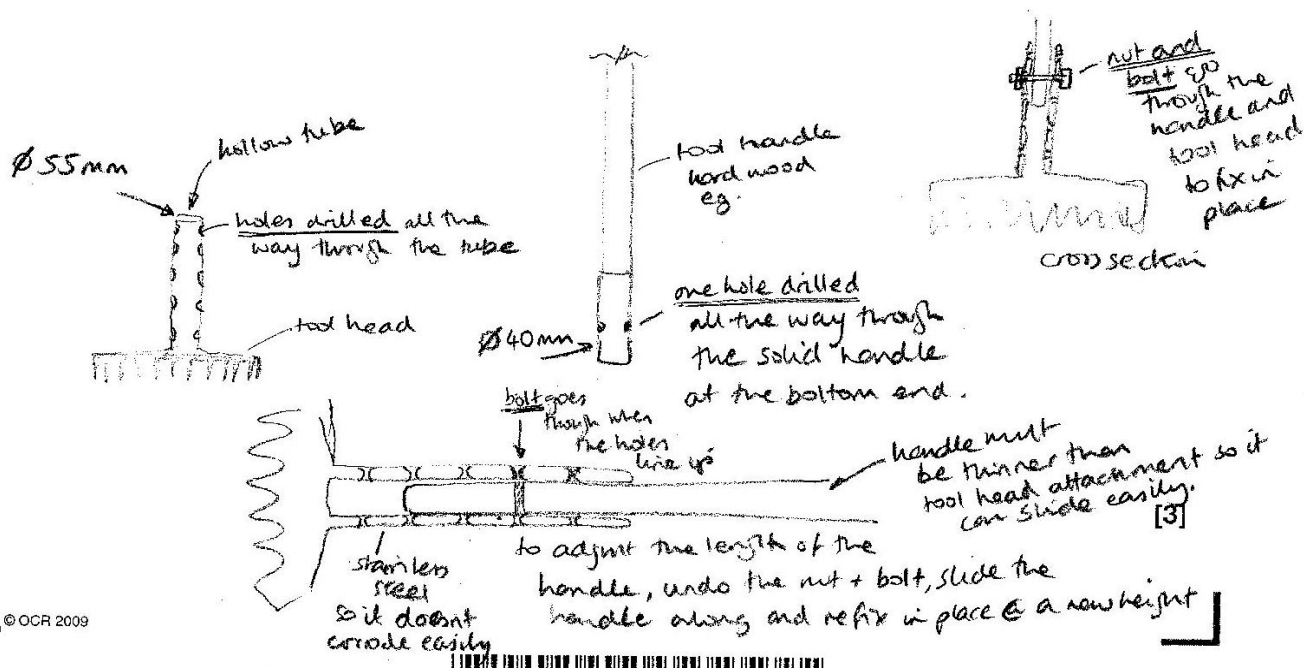
Many of the metal parts of the garden tools shown are welded together.

State **one** disadvantage of using welding to fix the parts together.


welding is a permanent fixing so no adjustments could be made [1]

TASK 1- CONTD

- (f) Use sketches and notes to show a method of attaching an interchangeable tool head to a handle.



TASK 1 – MARK SCHEME

| Question | Answer | Marks |
|----------|---|-------|
| 5 (a) |  <p>Pivot Point</p> | [1] |
| (b) | Lengthened | [1] |
| (c) | <p>Answers related to aluminium: does not rust / (accept not corrode) lightweight (not light), light so easy to pick up / carry</p> <p>AND / OR Answers related to tube: hollow so lighter in weight / not as heavy, can have different sizes so one can fit inside the other (related to the adjustment), no edges to 'dig' into hand.</p> <p>AND / OR Answers related to oval profile: not round so better grip when holding / using, stronger structure.</p> <p>1 mark each for two different reasons given related to aluminium, or tube or oval profile</p> | [2] |
| (d) | <p>The key issue is "safely" hung. Any suitable method shown including tool hooks/ nail and homemade suggestions (1)</p> <p>Safely stored i.e. securely fitted so will not fall or blade kept closed (1)</p> | [2] |
| (e) | <p>Permanent fixing cannot be changed adjusted, if weld breaks, hard / difficult / difficult to repair, no user changes / adjustments allowed.</p> <p>Cannot be taken apart.</p> | [1] |
| (f) | <p>1 mark for a potentially successful method indicated</p> <p>1 mark for appropriate modification to handle</p> <p>1 mark for appropriate modification to tool head</p> | [3] |

TASK 2

Using what you have learnt by looking at the exemplar answer in task 1, print off and answer the product analysis question from the 2008 GCSE paper (this is the same question for both Foundation and Higher candidates, just click on this link

http://www.ocr.org.uk/download/pp_08_jun/ocr_31480_pp_08_jun_l_gcse_1956_03.pdf and look for Question no. 5)

TASK 3

Now mark your answer using the mark scheme which can be found here:

http://www.ocr.org.uk/download/ms_08/ocr_16536_ms_08_l_gcse_jun.pdf you need to look at Page 12 and 13 of this document – again this is Question 5. There are some good opportunities here for you to identify your weaknesses and revise this material. Examiners recommend that pupils should re-do questions (use a different colour pen). The more familiar you are with the exam paper and understanding what examiners are looking for, the more able you will be to answer questions effectively.

TASK 4

Research your pre-release topic for the June 2010 exam 'stacking chairs'. More details can be found by following the following link

http://www.ocr.org.uk/download/prm/ocr_37223_prm_l_gcse_unit_1956.pdf

The more information you can find out, the easier you will find the question! Photograph, sketch, record notes of examples, their mechanisms, construction, exact materials used, how they stack etc. This information will be needed immediately after Easter.

EXTENSION

Follow this link to other past papers and mark schemes, remember to practice questions from your tier (i.e. If you are sitting foundation papers in the summer, you don't need to practice higher papers and vice versa!) Don't forget MSM (Materials, Size, Method) labels and 'Sketches and notes'!

http://www.ocr.org.uk/qualifications/type/l_gcse/dt/rmt/documents/index.html

If you want to know from the exam board what students did wrong last year, follow this link... you might find it very helpful!

http://www.ocr.org.uk/download/rep_09/ocr_35308_rep_09_l_gcse_jun.pdf

ANF FINALLY.....

These are some other useful links to revision sites which you can look at to help you with your subject knowledge.... (Don't forget your revision guide too)

ALL TECHNOLOGY SUBJECTS

www.technologystudent.com

www.designandtech.com (most comprehensive Design and Technology Website there is)

www.techitout.com

www.dtonline.org/ (good basic information – definitions etc)

www.bbc.co.uk/schools/gcsebitesize/design/ (revision materials and tests)

www.design-technology.info/home.htm (colourful and detailed website)

ERGONOMICS

<http://www.ergonomics.org.uk/ergonomics.htm>

<http://www.ergonomics4schools.com/index.htm> (ergonomics in student speak)

ANTHROPOMETRICS

<http://www.ergonomics4schools.com/lzone/anthropometry.htm> (anthropometrics in student speak)

MECHANISMS

<http://www.flying-pig.co.uk/>

<http://www.cabaret.co.uk/education/educat1.htm>

GOOD LUCK!