MATERIALS DESIGN AND TECHNOLOGY
GENERAL COURSE

Externally set task
Sample 2016
Note: This Externally set task sample is based on the following content from Unit 3 of the General Year 12 syllabus.

Design

Design fundamentals and skills
- devise:
  - using communication and documentation techniques
    - sketching and drawing
    - rendering
    - annotating
  - understanding the use of the elements and principles of design where applicable in context
    - line
    - shape
    - form
    - texture
    - contrast
    - proportion
    - balance
    - colour
  - rapid concept development techniques to generate design ideas and concepts
  - final design concept, using design brief and performance criteria
  - review of best idea using design brief and performance criteria
- design solution
  - developing best concept using annotated hand or computer generated graphics (front, back views and detailed sketches as necessary)
  - 2D illustrations (working/technical drawings)
  - 3D illustration (presentation drawings)
  - inspiration/concept/storyboard
- production plans
  - materials list
  - time line for stages of production

Use of technology

Skills and techniques
- context appropriate drawing and relevant technical information to produce the final product to demonstrate:
  - sketching rapid concept developments
  - 3D presentation drawings
  - rendering techniques

In future years, this information will be provided late in Term 3 of the year prior to the conduct of the Externally set task. This will enable teachers to tailor their teaching and learning program to ensure that the content is delivered prior to the students undertaking the task in Term 2 of Year 12.

Copyright
© School Curriculum and Standards Authority, 2014

This document – apart from any third party copyright material contained in it – may be freely copied, or communicated on an intranet, for non-commercial purposes in educational institutions, provided that the School Curriculum and Standards Authority is acknowledged as the copyright owner, and that the Authority’s moral rights are not infringed.

Copying or communication for any other purpose can be done only within the terms of the Copyright Act 1968 or with prior written permission of the School Curriculum and Standards Authority. Copying or communication of any third party copyright material can be done only within the terms of the Copyright Act 1968 or with permission of the copyright owners.

Any content in this document that has been derived from the Australian Curriculum may be used under the terms of the Creative Commons Attribution-NonCommercial 3.0 Australia licence

Disclaimer
Any resources such as texts, websites and so on that may be referred to in this document are provided as examples of resources that teachers can use to support their learning programs. Their inclusion does not imply that they are mandatory or that they are the only resources relevant to the course.

2014/8541
1. Think of a project you have designed and produced. Outline your design problem or situation by writing a statement of intent identifying the design considerations and requirements. (4 marks)
2. Produce a series of annotated concept sketches, graphical displays, or drawn diagrams to demonstrate the development of design ideas and concepts around design fundamentals. Devise and propose an appropriate solution to your design problem or situation.  

(10 marks)

________________________________________________________________________________
________________________________________________________________________________
________________________________________________________________________________
3. Using standard drawing conventions, prepare sketched presentation drawing/s of the proposed design solution. (6 marks)
4. Present a list of materials you would use in the production of the product. (4 marks)

<table>
<thead>
<tr>
<th>Part Name</th>
<th>Material</th>
<th>Size</th>
<th>Number required</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. Outline a production plan, estimating the time required for each stage to complete the production. (6 marks)

________________________________________________________________________________
________________________________________________________________________________
________________________________________________________________________________
________________________________________________________________________________
________________________________________________________________________________
________________________________________________________________________________
________________________________________________________________________________
________________________________________________________________________________
________________________________________________________________________________