



National  
Qualifications  
2023

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# 2023 Graphic Communication

## National 5

### Finalised Marking Instructions

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These marking instructions have been prepared by examination teams for use by SQA appointed markers when marking external course assessments.

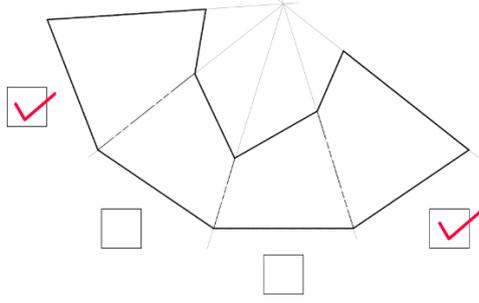
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## General marking principles for National 5 Graphic Communication

*Always apply these general principles. Use them in conjunction with the specific marking instructions, which identify the key features required in candidates' responses.*

- (a) Always use positive marking. This means candidates accumulate marks for the demonstration of relevant skills, knowledge and understanding; marks are not deducted for errors or omissions.
- (b) If a candidate response does not seem to be covered by either the principles or detailed marking instructions, and you are uncertain how to assess it, you must seek guidance from your team leader.
- (c) For 'Describe' questions  
Candidates must provide a statement or structure of characteristics and/or features, not just an outline or a list. For example they can refer to a concept, experiment, situation or facts in the context of and appropriate to the question. The number of marks available for a question indicates the number of factual/appropriate points required.
- (d) For 'Explain' questions  
Candidates must relate cause and effect and/or define relationships. This must be in the context of the question, or a specific area within the question.
- (e) For 'Compare' questions  
Candidates must demonstrate knowledge and understanding of the similarities and/or differences between things, methods, or choices. This must be in the context of the question, or a specific area within the question.
- (f) Candidates can respond to any question using text, sketching, annotations or combinations of these. Award marks for the information conveyed. Do not award marks for the quality of sketching.

| Question |     | Expected response  | Max mark | Additional guidance   |
|----------|-----|--|----------|---|
| 1.       | (a) |   | 2        |   |
|          | (b) | Fourth   | 1        |   |
|          | (c) | Top right  | 1        |   |
|          | (d) | <ul style="list-style-type: none"> <li>• Create a 2D sketch on the inside of the base circle diameter 50mm. Extrude circle by 50mm.</li> <li>• On top of cylinder feature, 2D sketch of diameter 35mm circle.</li> <li>• Subtract 35mm.</li> <li>• 2.5mm chamfer on top edge.</li> <li>• 2mm fillet on bottom edge.</li> </ul> | 5        | <p>To award the marks for chamfer and fillet, the edges must be clearly identified, either through description or sketches.</p> <p>Follow On rule should be applied where candidates have mixed up fillet and chamfer at both stages.</p> |
|          | (e) | <ul style="list-style-type: none"> <li>(i) Line</li> <li>(ii) Trim</li> <li>(iii) Mirror</li> <li>(iv) Rotate</li> <li>(v) Scale</li> </ul>  | 5        | Accept “zoom” for question (v)  |
|          | (f) | <ul style="list-style-type: none"> <li>• Universally understood.</li> <li>• Not specific to a language.</li> <li>• Modern.</li> <li>• Familiar to users.</li> <li>• Takes up less space.</li> <li>• Easy to understand.</li> <li>• Easier to read than words.</li> </ul>   | 2        | Do not accept only “easy to read/see”.  |

| Question |     |       | Expected response  | Max mark | Additional guidance  |
|----------|-----|-------|--|----------|--|
| 2.       | (a) | (i)   | <ul style="list-style-type: none"> <li>Helps to create depth.</li> <li>Helps to create contrast.</li> <li>Helps to create contrast between the rectangle and the circle.</li> </ul>  | 1        | Do not accept contrast of orange and purple.   |
|          |     | (ii)  | <ul style="list-style-type: none"> <li>Creates contrast.</li> <li>Red is an advancing colour.</li> </ul>   | 1        | Marks cannot be awarded where the same response has been used for 2ai  |
|          |     | (iii) | <ul style="list-style-type: none"> <li>Creates dominance.</li> <li>Contrast of size between title and body text.</li> </ul>  | 1        | Marks cannot be awarded where the same response has been used for either 2ai or 2aii<br><br>Accept “creates focal point”.<br>Included in the AHGC course spec as a design element/principle. |
|          | (b) |       | <ul style="list-style-type: none"> <li>Quick way of creating a range of ideas.</li> <li>Quick to produce.</li> <li>Allows ideas to be explored.</li> <li>Can be shared with client.</li> <li>Aids process to final DTP layout.</li> </ul>  | 1        |  |
|          | (c) | (i)   | Clear identification on graphic of body text wrapping around brown curved shape.   | 1        |  |
|          |     | (ii)  | Clear identification on graphic of any example of reverse.   | 1        |  |
|          |     | (iii) | Clear identification on graphic of any example of drop shadow on right-hand images.  | 1        |  |
|          |     | (iv)  | Clear identification on graphic of “click to find out more”.   | 1        |  |
|          | (d) |       | <ul style="list-style-type: none"> <li>Body text and heading are left aligned.</li> <li>Images are centrally/vertical aligned.</li> <li>Third image down is bottom aligned with the bottom of the extended text.</li> <li>“Page” is centrally/vertical aligned to each image below.</li> </ul> | 2        | Answer must include the type of alignment used - ie, central   |
|          | (e) | (i)   | Left image   | 1        |  |
|          |     | (ii)  | <ul style="list-style-type: none"> <li>A3 is double A4.</li> <li>A4 is half the size of A3.</li> <li>Both have the same aspect ratio.</li> </ul>   | 1        | Do not accept “bigger” or “smaller”.   |
|          | (f) | (i)   | <ul style="list-style-type: none"> <li>Reduction of pollution due to less travel.</li> </ul>   | 1        | Do not accept “reduction of pollution” or “reduction of travel” on their own.  |
|          |     | (ii)  | <ul style="list-style-type: none"> <li>Use sustainable inks.</li> <li>Use recycled paper.</li> <li>Use recyclable paper.</li> <li>Reduce the size of the documents.</li> <li>Use less ink.</li> </ul>  | 2        |  |

| Question |     | Expected response  | Max mark | Additional guidance  |
|----------|-----|--|----------|--|
| 3.       | (a) | <ul style="list-style-type: none"> <li>• Communicate sizes/dimensions.</li> <li>• Show how components are assembled.</li> <li>• Can show materials.</li> <li>• Helps to ensure accuracy of manufacture.</li> </ul>   | 1        |  |
|          | (b) | Oblique  | 1        | Accept cabinet oblique   |
|          | (c) | Top left   | 1        |  |
|          | (d) | <ul style="list-style-type: none"> <li>• 2D sketch of front face with dimensions.</li> <li>• Extrude 400mm.</li> <li>• 2D sketch 100mmx25mm in middle of side (on both sides).</li> <li>• Extrude rectangles 30mm</li> <li>• 2D sketches of all holes in correct positions.</li> <li>• Subtract 20mm.</li> </ul>   | 6        | At bullet 5 - if a candidate shows the position of the circles in the centre of the top through a sketch but misses the 12.5mm dimension then award the mark, if this is the only dimension missing. |
|          | (e) | <ul style="list-style-type: none"> <li>• Required components are next to each stage.</li> <li>• Trails on exploded views show where parts align.</li> <li>• Final stage exploded isometric is rotated to show the back more clearly.</li> <li>• Green circles get darker.</li> <li>• Green circles get larger.</li> <li>• Each stage is in a box to improve clarity.</li> <li>• Size of the numbers of each stage increases.</li> <li>• Rectangles get bigger as the stages progress.</li> <li>• Steps are positioned in order top to bottom.</li> </ul> | 4        | Any four correct responses   |
|          | (f) | <ul style="list-style-type: none"> <li>• Aids correct alignment.</li> <li>• Effective spacing.</li> <li>• Allows a good level of accuracy.</li> <li>• Speeds up process.</li> <li>• Assist in sizing of objects.</li> </ul>  | 1        |  |
|          | (g) | <ul style="list-style-type: none"> <li>• Animations showing how parts assemble.</li> <li>• Videos showing how parts assemble.</li> <li>• Links to other media.</li> </ul>  | 2        | Any other suitable response<br><br>Any video or link described must be contextualised.<br><br>Do not accept “zoom in”.   |

| Question |     | Expected response   | Max mark   | Additional guidance   |   |
|----------|-----|---|--|---|---|
| 4.       | (a) | <ul style="list-style-type: none"> <li>Provides a tactile, physical product.</li> <li>Unskilled people can create accurate physical models.</li> <li>Quicker than making an accurate/complex physical model manually.</li> <li>Evaluate proportions from a physical model.</li> <li>Target market evaluation from a physical model.</li> <li>Test physical model for safety.</li> <li>Physical model to test an object.</li> <li>Allows for an accurate physical model to be created.</li> <li>Uses less materials when making a physical product.</li> </ul> | 1  | <p>Answer must make reference to a physical model.</p> <p>If describing quicker then reference <b>must</b> be made to complexity or accuracy to award the mark.</p>                       |   |
|          | (b) | <p>Stage 2</p> <ul style="list-style-type: none"> <li>Material</li> <li>Surface Texture</li> </ul> <p>Stage 3</p> <ul style="list-style-type: none"> <li>Light source</li> <li>Material</li> <li>Surface Texture</li> </ul>   | 2  | <p>Do not accept colour on its own.</p> <p>Stage 2: Accept colour with material/texture.</p> <p>Where a response has repeated, only one mark can be awarded.</p> <p>Accept “texture”.</p> |   |
|          | (c) | (i)   | Add white  | 1   |   |
|          |     | (ii)  | <ul style="list-style-type: none"> <li>Orange</li> <li>Green</li> <li>Violet/purple</li> </ul> | 1   |   |
|          | (d) | (i)   | Red-orange or red-violet/purple  | 1   |   |
|          |     | (ii)  | Red-orange or red-violet/purple  | 1   | Must be different to answer in part (i) |

| Question |     |       | Expected response  | Max mark | Additional guidance  |
|----------|-----|-------|--|----------|--|
| 5.       | (a) | (i)   | 600mm  | 1        |  |
|          |     | (ii)  | 750mm  | 1        |  |
|          |     | (iii) | 750mm  | 1        |  |
|          |     | (iv)  | 300mm  | 1        |  |
|          |     | (v)   | 850mm  | 1        |  |
|          |     | (vi)  | 50mm   | 1        |  |
|          | (b) |       | Second from left   | 1        |  |
|          | (c) |       | <ul style="list-style-type: none"> <li>• Create a 2D sketch of profile with correct dimensions.</li> <li>• Centre axis correctly identified.</li> <li>• Revolve the profile 360 degrees.</li> <li>• Create a 2D sketch of 12mm square and extrude 12mm.</li> </ul> | 4        | <p>Extrude method:</p> <ul style="list-style-type: none"> <li>• Sketch circle diameter 28mm and extrude 5mm.</li> <li>• Chamfer edge.</li> <li>• Chamfer at 38.66°. (Accept 38° -39° or 51° - 52°)</li> <li>• Create a 2D sketch of 12mm square and extrude 12mm.</li> </ul> <p>Loft method:</p> <ul style="list-style-type: none"> <li>• Profiles Ø28 and Ø20 correct.</li> <li>• Offset of 5mm.</li> <li>• Loft command.</li> <li>• Create a 2D sketch of 12mm square and extrude 12mm.</li> </ul> |

[END OF MARKING INSTRUCTIONS]