Retrospective 2000

PAPER 1
THE WRITING TASK

PAPER 2
MULTIPLE-CHOICE I

PAPER 3
SHORT-RESPONSE

PAPER 4
MULTIPLE-CHOICE II

Queensland Board of Senior Secondary School Studies
Foreword

Welcome to the first web publication of the annual *Retrospective*. It provides detailed and wide-ranging feedback on the year 2000 Queensland Core Skills (QCS) Test and the responses of candidates. The QCS Test comprises four papers in three modes of assessment—multiple-choice, extended writing and short-response.

The core skills are the threads or common curriculum elements (CCEs) that are within the experienced curriculum of at least 95 per cent of students. The level of sophistication demanded by the test is appropriate to Year 12 students, and the test is non-subject specific. It is a cross-curriculum test. That is, it does not test the content of specific subjects. Rather it tests the skills learnt from the combination of subjects in a balanced curriculum.

It consists of four testpapers—the Writing Task, the Short-Response and two Multiple-Choice papers. Candidates experience a variety of stimulus material such as prose passages, poetry, graphs, tables, maps, mathematical and scientific data, cartoons, and reproductions of works of art.

The *Retrospective* is a definitive and descriptive report on the integration of the test specifications, the expectations of the testsetter, and the performance characteristics of the candidates. It also provides information on the relative worth of items on the test, data that allow the determination of candidate achievement on the test.

The *Retrospective* does not include the actual testpapers. All schools receive copies of the testpapers during the administration of the QCS Test. Any individual or organisation requiring copies may purchase these from the Office of the Board.

In addition to having value at school level, this publication should appeal to a wider audience. In fact, anyone interested in across-the-curriculum testing is sure to find it informative.

John A Pitman
Director
Contents

Multiple-Choice (MC) I & II (Papers 2 and 4)

Commentary ................................................................. 1
Common curriculum elements and the MC format .................. 4
Response key and common curriculum elements tested within MC I & II . 5
Average facility rates for the units (presented in decreasing order) .... 8

Short-Response (SR) (Paper 3)

General commentary ....................................................... 9
Model responses and commentaries on how candidates performed .... 9
Marking schemes ............................................................. 10
Common curriculum elements tested by short-response items ......... 74

The Writing Task (WT) (Paper 1)

Commentary ................................................................. 75
Criteria and standards schema for marking ............................ 80
Selected candidate responses ............................................ 83
Non-English students ....................................................... 95

Relative worth of each subtest

Relative worth of items on the QCS Test ............................. 101
Deemed CCEs and QCS items ........................................... 103
Balance of the QCS Test in terms of CCEs ............................ 103

Appendices

Appendix 1: The 49 common curriculum elements ..................... 105
Appendix 2: Glossary of terms ............................................ 111
Multiple-Choice (MC) I & II (Papers 2 and 4)

Commentary

The names given to the MC units appear in italics, and the table on pages 5–7, which gives the response keys and assigned common curriculum elements (CCEs), can be used to match the unit name to the corresponding items.

The MC testpapers

As in previous years, the MC subtest of the QCS Test consisted of two testpapers, each with 50 multiple-choice items. In all, there were 25 units on this year’s MC testpapers, testing a range of common curriculum elements.

The MC testpapers assessed verbal, numerical and visual-spatial understandings. Most of the units tested more than one of these. The MC testpapers tested, in particular, visual-spatial understandings in association with either verbal texts (e.g. captions to cartoons) and/or numerical texts (e.g. diagrams and geometrical figures) rather than in isolation. A feature of this year’s MC subtest was the emphasis on visual-spatial material as a basis for assessing spatial, verbal and numerical understandings, with 14 of the 25 units incorporating significant visual material (not including tables, graphs and geometrical figures).

In the realm of verbal understandings the main epistemic areas covered included literature (Unit 24 Clayton & Sykes; Unit 4 Lawrence; and to a large extent Unit 19 Button monument), ordinary language (Unit 3 Confusibles), social sciences (Unit 13 Law; Unit 15 Dating the enemy) and psychology (Unit 9 Self-concept). To judge by the average facilities for these units, candidates generally found them challenging. Unit 24 Clayton & Sykes contained rich and finely nuanced English expression, and was expected to challenge candidates more strenuously than it did. The other ‘high verbal’ unit, Unit 13 Law, proved to be the most challenging unit on the MC subtest. Though fairly straightforward in its vocabulary, the text in this unit was conceptually dense and its structure quite formal. The other verbal units were handled reasonably well by candidates. In terms of its facility, the most difficult item on the MC subtest was Item 55 in Unit 15. This item required candidates to understand the use of quotation marks to convey irony; only 13 per cent of candidates picked up the ironic intent. Generally, however, candidates performed well in recognising implication and other subtextual meanings.

Those MC units which linked verbal and visual-spatial understandings covered epistemic areas including visual arts, social sciences, linguistics, biological sciences and history. These units also covered a variety of genres, such as cartoons (Unit 1 Panel of experts and Unit 11 Love & truth), artworks (Unit 7 Painting styles and Unit 19 Button monument), diagrams (Unit 14 Links as codes, Unit 12 Bird learning and Unit 17 Language tree) and illustrations (Unit 6 Coins, Unit 18 Helicopters and Unit 21 Embroidery). Several of these units required candidates to classify (Units 7, 17 and 21) or sequence (Units 6 and 18) visual material. The others required candidates to interrelate and analyse verbal and visual-spatial information and then to synthesise meaning (Units 1, 11, 12, 14, 19). Most of these units were handled comfortably by candidates. The most challenging of this group of units was Unit 12 Bird learning, which required
candidates to assimilate a strong body of verbal text and a number of diagrams, and, most difficult of all, to ‘move’ the diagrams in their mind’s eye. Holding a static spatial construct in mind is challenging enough for most people, but mentally moving that construct in a prescribed way presents a challenge to which few respond successfully. The unit on the MC subtest that most students answered correctly was Unit 7 Painting styles; to judge by the very high average facility, this unit did not stretch candidates’ abilities to understand image construction.

Spanning the visual-spatial and numerical realms were Units 5 Radio waves, 10 Mayan numbers, 23 Arcs and 25 Staircases. Two of these units required candidates to understand the meaning of diagrams (Units 5 and 25), while Unit 23 examined Pythagoras’ Theorem and ratio in the context of geometry, and Unit 10 dealt with a pictographic number system. These units covered the areas of physics, mathematics, history, geometry and building. They proved quite challenging for candidates. One of the most challenging items on the MC subtest was the last item, 100, in the Staircases unit. It may be significant that this item was similar to the items in Unit 23 Arcs in that it required candidates to apply their knowledge of geometry to the formation of ratios, though in Item 100 candidates were faced with the added complexity of having to recognise the relevant geometry (i.e. similar triangles) in the real context of a staircase. Most of the items in Unit 25 required candidates to manipulate algebraic formulae; with one exception, candidates found these items quite challenging. Several items in this group of units involved relatively straightforward arithmetical calculations, and these appear to have been handled quite well by candidates.

Combining verbal and numerical understandings was Unit 22 Aral sea, which touched on the epistemic areas of history and geography and was couched within a framework of personal reflection. Straddling all three cognitive domains was Unit 2 Risk, based on an advertisement that combined a strong verbal text, a statistical table and various diagrams. Candidates handled the Risk unit comfortably, as also the verbal items in Aral sea, but found the quantitative items in the latter unit (one arithmetical, the other geometrical) more challenging.

The main units to test numerical understandings were Units 8 Panning for gold, 16 Unemployment and 20 Phenol/water mix. Unit 8 required candidates to calculate (and to use algebra) based on information presented verbally and diagrammatically. Most of this unit’s items required arithmetical calculations. The unit proved to be challenging, particularly Items 31 and 32, which required an understanding of algebra. Unit 16, based in the social sciences, presented information in the form of a table, while Unit 20, based in the physical sciences, required candidates to understand information in graphical form. Both units proved quite challenging for candidates, particularly Phenol/water mix. Unit 16 called for basic arithmetical calculations; the two items on percentage had amongst the lowest facilities on the MC subtest. On the other hand, Item 59 in this unit, which required candidates to translate tabular information into graphical form, had one of the highest facilities. Unit 20 presented candidates with two quite challenging graphs, and it is clear that most candidates had difficulty in understanding more than the most basic aspects of the graphs.

Omit rates for individual items on the MC subtest were extremely small, with an average of 0.24 per cent and a maximum of about 1 per cent. Units in which omit rates for each item were consistently above average (and typically up to two or
three times the average) included Unit 10 Mayan numbers, Unit 12 Bird learning, Unit 13 Ethics/law, and Unit 25 Staircase. Of these, Unit 13 Ethics/law recorded the highest average omit rate (0.81 per cent), which may be attributable to both its intrinsic complexity and its placement at the end of the MC I testpaper. Similarly, the last unit on the MC II testpaper had a much higher than average omit rate. The highest omit rate on an individual-item basis was shared by Item 41 (Mayan numbers) and Item 47 (Bird learning), both at 1.09 per cent; both items had very low facilities.
Common curriculum elements and the MC format

Of the 49 CCEs, some cannot be tested directly in MC format:

• Summarising/condensing written text
• Compiling lists/statistics
• Recording/noting data
• Compiling results in a tabular form
• Graphing
• Setting out/presenting/arranging/displaying
• Structuring/organising extended written text
• Structuring/organising a mathematical argument
• Explaining to others
• Expounding a viewpoint
• Creating/composing/devising
• Observing systematically
• Gesturing
• Manipulating/operating/using equipment
• Sketching/drawing.

The above CCEs can be validly tested in SR format.

Some of these CCEs can be tested at ‘second order’ level in MC format.
### Response key and common curriculum elements tested within MC I & II

<table>
<thead>
<tr>
<th>Unit</th>
<th>Item</th>
<th>Key</th>
<th>Common Curriculum Elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Panel of experts</td>
<td>1</td>
<td>D</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Risk</td>
<td>3</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7</td>
<td>D</td>
</tr>
<tr>
<td>3</td>
<td>Confusables</td>
<td>8</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9</td>
<td>D</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11</td>
<td>D</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12</td>
<td>C</td>
</tr>
<tr>
<td>4</td>
<td>Lawrence</td>
<td>13</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td></td>
<td>14</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td></td>
<td>16</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td></td>
<td>17</td>
<td>D</td>
</tr>
<tr>
<td>5</td>
<td>Radio waves</td>
<td>18</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td></td>
<td>19</td>
<td>D</td>
</tr>
<tr>
<td></td>
<td></td>
<td>20</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td></td>
<td>21</td>
<td>D</td>
</tr>
<tr>
<td></td>
<td></td>
<td>22</td>
<td>B</td>
</tr>
<tr>
<td>6</td>
<td>Coins</td>
<td>23</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Interrelating ideas/themes/issues</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Inserting an intermediate between members of a series</td>
</tr>
<tr>
<td>7</td>
<td>Painting styles</td>
<td>24</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td></td>
<td>25</td>
<td>C</td>
</tr>
<tr>
<td>8</td>
<td>Panning for gold</td>
<td>26</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>27</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td></td>
<td>28</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td></td>
<td>29</td>
<td>D</td>
</tr>
<tr>
<td></td>
<td></td>
<td>30</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td></td>
<td>31</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td></td>
<td>32</td>
<td>D</td>
</tr>
<tr>
<td>9</td>
<td>Self-concept</td>
<td>33</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td></td>
<td>34</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td></td>
<td>35</td>
<td>D</td>
</tr>
<tr>
<td></td>
<td></td>
<td>36</td>
<td>A</td>
</tr>
<tr>
<td>Unit</td>
<td>Item</td>
<td>Key</td>
<td>Common Curriculum Elements</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>------</td>
<td>-----</td>
<td>-------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>10 Mayan numbers</td>
<td>37</td>
<td>C</td>
<td>Interpreting the meaning of diagrams</td>
</tr>
<tr>
<td></td>
<td>38</td>
<td>D</td>
<td>Translating from one form to another</td>
</tr>
<tr>
<td></td>
<td>39</td>
<td>D</td>
<td>Calculating</td>
</tr>
<tr>
<td></td>
<td>40</td>
<td>A</td>
<td>Interrelating ideas/themes/issues</td>
</tr>
<tr>
<td></td>
<td>41</td>
<td>C</td>
<td>Judging/evaluating</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Hypothesising</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Perceiving patterns</td>
</tr>
<tr>
<td>11 Love and truth</td>
<td>42</td>
<td>C</td>
<td>Interpreting the meaning of diagrams</td>
</tr>
<tr>
<td></td>
<td>43</td>
<td>A</td>
<td>Translating from one form to another</td>
</tr>
<tr>
<td>12 Bird learning</td>
<td>44</td>
<td>A</td>
<td>Interpreting the meaning of diagrams</td>
</tr>
<tr>
<td></td>
<td>45</td>
<td>D</td>
<td>Interrelating ideas/themes/issues</td>
</tr>
<tr>
<td></td>
<td>46</td>
<td>D</td>
<td>Deducing*</td>
</tr>
<tr>
<td></td>
<td>47</td>
<td>B</td>
<td>Inserting an intermediate between members of a series</td>
</tr>
<tr>
<td>13 Ethics/law</td>
<td>48</td>
<td>D</td>
<td>Interpreting the meaning of words</td>
</tr>
<tr>
<td></td>
<td>49</td>
<td>B</td>
<td>Inferring†</td>
</tr>
<tr>
<td></td>
<td>50</td>
<td>A</td>
<td>Analysing</td>
</tr>
<tr>
<td>14 Links as codes</td>
<td>51</td>
<td>B</td>
<td>Interpreting the meaning of diagrams</td>
</tr>
<tr>
<td></td>
<td>52</td>
<td>C</td>
<td>Deducing*</td>
</tr>
<tr>
<td>15 Dating the enemy</td>
<td>53</td>
<td>A</td>
<td>Interpreting the meaning of words</td>
</tr>
<tr>
<td></td>
<td>54</td>
<td>B</td>
<td>Using correct spelling/punctuation/grammar</td>
</tr>
<tr>
<td></td>
<td>55</td>
<td>B</td>
<td>Interrelating ideas/themes/issues</td>
</tr>
<tr>
<td></td>
<td>56</td>
<td>D</td>
<td>Analysing</td>
</tr>
<tr>
<td></td>
<td>57</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>16 Unemployment</td>
<td>58</td>
<td>C</td>
<td>Interpreting the meaning of tables</td>
</tr>
<tr>
<td></td>
<td>59</td>
<td>C</td>
<td>Calculating</td>
</tr>
<tr>
<td></td>
<td>60</td>
<td>C</td>
<td>Applying a progression of steps to achieve the required answer</td>
</tr>
<tr>
<td></td>
<td>61</td>
<td>B</td>
<td>Perceiving patterns</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Extrapolating</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Translating from one form to another</td>
</tr>
<tr>
<td>17 Language tree</td>
<td>62</td>
<td>B</td>
<td>Interpreting the meaning of diagrams</td>
</tr>
<tr>
<td></td>
<td>63</td>
<td>A</td>
<td>Classifying</td>
</tr>
<tr>
<td></td>
<td>64</td>
<td>D</td>
<td></td>
</tr>
<tr>
<td>18 Helicopters</td>
<td>65</td>
<td>B</td>
<td>Interpreting the meaning of illustrations</td>
</tr>
<tr>
<td></td>
<td>66</td>
<td>C</td>
<td>Perceiving patterns</td>
</tr>
<tr>
<td></td>
<td>67</td>
<td>A</td>
<td>Visualising</td>
</tr>
<tr>
<td></td>
<td>68</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>19 Button monument</td>
<td>69</td>
<td>A</td>
<td>Interpreting the meaning of words</td>
</tr>
<tr>
<td></td>
<td>70</td>
<td>C</td>
<td>Interpreting the meaning of pictures</td>
</tr>
<tr>
<td></td>
<td>71</td>
<td>B</td>
<td>Interrelating ideas/themes/issues</td>
</tr>
<tr>
<td></td>
<td>72</td>
<td>A</td>
<td>Deducing*</td>
</tr>
<tr>
<td></td>
<td>73</td>
<td>D</td>
<td>Inferring†</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Visualising</td>
</tr>
<tr>
<td>20 Phenol/water mix</td>
<td>74</td>
<td>B</td>
<td>Interpreting the meaning of graphs</td>
</tr>
<tr>
<td></td>
<td>75</td>
<td>B</td>
<td>Calculating</td>
</tr>
<tr>
<td></td>
<td>76</td>
<td>A</td>
<td>Comparing/contrasting</td>
</tr>
<tr>
<td></td>
<td>77</td>
<td>A</td>
<td>Inferring†</td>
</tr>
<tr>
<td></td>
<td>78</td>
<td>C</td>
<td>Applying a progression of steps to achieve the required answer</td>
</tr>
<tr>
<td>Unit</td>
<td>Item</td>
<td>Key</td>
<td>Common Curriculum Elements</td>
</tr>
<tr>
<td>--------------</td>
<td>------</td>
<td>-----</td>
<td>----------------------------------------------------------------</td>
</tr>
<tr>
<td>21 Embroidery</td>
<td>79</td>
<td>C</td>
<td>Interpreting the meaning of pictures</td>
</tr>
<tr>
<td></td>
<td>80</td>
<td>B</td>
<td>Classifying</td>
</tr>
<tr>
<td></td>
<td>81</td>
<td>D</td>
<td>Inferring†</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Empathising</td>
</tr>
<tr>
<td>22 Aral sea</td>
<td>82</td>
<td>C</td>
<td>Interpreting the meaning of words</td>
</tr>
<tr>
<td></td>
<td>83</td>
<td>D</td>
<td>Calculating</td>
</tr>
<tr>
<td></td>
<td>84</td>
<td>C</td>
<td>Deducing*</td>
</tr>
<tr>
<td></td>
<td>85</td>
<td>D</td>
<td>Inferring†</td>
</tr>
<tr>
<td></td>
<td>86</td>
<td>C</td>
<td>Applying a progression of steps to achieve the required answer</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Interpreting the meaning of diagrams</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Judging/evaluating</td>
</tr>
<tr>
<td>23 Arcs</td>
<td>87</td>
<td>A</td>
<td>Interpreting the meaning of diagrams</td>
</tr>
<tr>
<td></td>
<td>88</td>
<td>B</td>
<td>Calculating</td>
</tr>
<tr>
<td></td>
<td>89</td>
<td>C</td>
<td>Applying a progression of steps to achieve the required answer</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Perceiving patterns</td>
</tr>
<tr>
<td>24 Clayton &amp; Sykes</td>
<td>90</td>
<td>A</td>
<td>Interpreting the meaning of words</td>
</tr>
<tr>
<td></td>
<td>91</td>
<td>D</td>
<td>Comparing/contrasting</td>
</tr>
<tr>
<td></td>
<td>92</td>
<td>A</td>
<td>Analysing</td>
</tr>
<tr>
<td></td>
<td>93</td>
<td>C</td>
<td>Empathising</td>
</tr>
<tr>
<td></td>
<td>94</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>25 Staircases</td>
<td>95</td>
<td>D</td>
<td>Interpreting the meaning of diagrams</td>
</tr>
<tr>
<td></td>
<td>96</td>
<td>B</td>
<td>Substituting in formulae</td>
</tr>
<tr>
<td></td>
<td>97</td>
<td>C</td>
<td>Interrelating ideas/themes/issues</td>
</tr>
<tr>
<td></td>
<td>98</td>
<td>D</td>
<td>Applying a progression of steps to achieve the required answer</td>
</tr>
<tr>
<td></td>
<td>99</td>
<td>B</td>
<td>Analysing</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>D</td>
<td></td>
</tr>
</tbody>
</table>

* Reaching a conclusion which is necessarily true provided a given set of assumptions is true
† Reaching a conclusion which is consistent with a given set of assumptions

**Note:**
The order of the CCEs tested for each unit does not reflect the order of the items, nor does it imply a cognitive hierarchy. Rather, the Common Curriculum Elements tested for each unit are given in the order in which they appear in appendix 1 (numbered 1–60).
### Average facility rates for the units (presented in decreasing order)

<table>
<thead>
<tr>
<th>Unit</th>
<th>Short Name</th>
<th>AFR (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Painting styles</td>
<td>88</td>
</tr>
<tr>
<td>18</td>
<td>Helicopters</td>
<td>75</td>
</tr>
<tr>
<td>2</td>
<td>Risk</td>
<td>75</td>
</tr>
<tr>
<td>14</td>
<td>Links as codes</td>
<td>68</td>
</tr>
<tr>
<td>6</td>
<td>Coins</td>
<td>63</td>
</tr>
<tr>
<td>4</td>
<td>Lawrence</td>
<td>63</td>
</tr>
<tr>
<td>21</td>
<td>Embroidery</td>
<td>63</td>
</tr>
<tr>
<td>1</td>
<td>Panel of experts</td>
<td>62</td>
</tr>
<tr>
<td>19</td>
<td>Button monument</td>
<td>61</td>
</tr>
<tr>
<td>11</td>
<td>Love and truth</td>
<td>60</td>
</tr>
<tr>
<td>5</td>
<td>Radio waves</td>
<td>57</td>
</tr>
<tr>
<td>3</td>
<td>Confusibles</td>
<td>57</td>
</tr>
<tr>
<td>9</td>
<td>Self-concept</td>
<td>56</td>
</tr>
<tr>
<td>24</td>
<td>Clayton and Sykes</td>
<td>55</td>
</tr>
<tr>
<td>22</td>
<td>Aral sea</td>
<td>52</td>
</tr>
<tr>
<td>16</td>
<td>Unemployment</td>
<td>52</td>
</tr>
<tr>
<td>8</td>
<td>Panning for gold</td>
<td>48</td>
</tr>
<tr>
<td>17</td>
<td>Language tree</td>
<td>48</td>
</tr>
<tr>
<td>15</td>
<td>Dating the enemy</td>
<td>46</td>
</tr>
<tr>
<td>10</td>
<td>Mayan numbers</td>
<td>45</td>
</tr>
<tr>
<td>25</td>
<td>Staircases</td>
<td>45</td>
</tr>
<tr>
<td>20</td>
<td>Phenol/water mix</td>
<td>43</td>
</tr>
<tr>
<td>23</td>
<td>Arcs</td>
<td>42</td>
</tr>
<tr>
<td>12</td>
<td>Bird learning</td>
<td>41</td>
</tr>
<tr>
<td>13</td>
<td>Ethics/law</td>
<td>39</td>
</tr>
</tbody>
</table>

**Notes:**
For an item, the facility index is defined as the proportion (percentage) of candidates who gave the correct response.
For a unit, the average facility rate (AFR) is taken to be the mean value of the facility indices of all items in that unit.
Short-Response (SR) (Paper 3)

General commentary

The Short-Response subtest offers the opportunity to test candidate’s achievements in richly varied ways. This year’s SR testpaper had a practical feel and many items had a strong focus on ‘authentic tasks’. One of this year’s items gave students the chance to show how they can turn plain English into the sort of ‘babble’ produced too often in official writing. Another let them show how well they can rewrite officialese into plain English. Another item asked students to apply real-life ideas of ‘better value’ to two party packs in a fish-and-chips shop, taking into account qualities and preferences as well as quantities and costs. Students also matched a painter’s reconstruction of how a building might once have looked with the evidence of a photograph of how it is today. In another part of the test, they had to work with a set of source materials (like the range to be found on the Internet) on a single topic.

As candidates worked through each unit, they interacted with stimulus material that presented challenging views of the world and required them to operate at multiple levels of numeracy and literacy. One unit drew on one of Archimedes’ contributions on finding the perimeter and area of a circle from first principles. The challenge in setting this unit was to frame it in a way that made it potentially accessible to all students.

Interesting also are the various contexts used to test candidates’ ability as in the case of the CCE 43 Analyzing. This CCE was tested in a number of ways in this short-response format. There were items requiring visual literacy, such as in Item 4, in which the stimulus was an unusual clock in Berlin that uses lit cells to display the time of day. The item in which candidates were required to analyse an amusement park ride in terms of increasing the time riders could stay on the ride, was set in the very familiar context of the children’s playground. In a more traditional context, the analysis of a poem about a has-been basketballer required the application of yet another kind of analytical skill.

Model responses and commentaries on how candidates performed

What follows is an item-by-item discussion that includes a model response, a histogram of the distribution of grades, a commentary on how candidates performed the task, and a marking scheme. At times, candidate responses are included to exemplify an observation.

In some cases the model responses are based on actual candidate work and, in such cases, are those which would invariably have been awarded the highest grade. The presence of any imperfection in written expression or mathematical prose does not mean that the Board is unaware of it, nor that it should be used by candidates in the future.
For some items the candidate responses were extremely varied, especially for the more open-ended items. For these it is not possible to provide an example of each of the many ways that candidates responded. The detailed and item-specific marking schemes indicate the scope of acceptability of responses. For the more closed items responses were less varied (as would be expected), but again the marking schemes demonstrate that different ways of perceiving 'the solution' were acceptable.

**Marking schemes**

The marking schemes are not designed to be read in isolation. They are but one element of the marking prescription. During the marking operation markers undergo rigorous training (immersion) in the application of marking schemes to candidate responses. This training involves careful consideration of the material presented byimmersers and documented in the immersion notes.

At the marking operation, testpaper units are reorganised into marking units—a collection of testpaper units compiled for organisational purposes during the SR marking operation. The following table lists each marking unit and its constituent testpaper units for the year 2000.

<table>
<thead>
<tr>
<th>Marking Unit</th>
<th>Testpaper Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ONE TEN</td>
</tr>
<tr>
<td>2</td>
<td>TWO SIX</td>
</tr>
<tr>
<td>3</td>
<td>THREE NINE</td>
</tr>
<tr>
<td>4</td>
<td>FOUR</td>
</tr>
<tr>
<td>5</td>
<td>FIVE SEVEN</td>
</tr>
<tr>
<td>8</td>
<td>EIGHT</td>
</tr>
</tbody>
</table>

Each page of a marking scheme is numbered in the bottom right-hand corner, e.g. Marking Unit 1 1 of 6. This pagination would read, page one of six pages in Marking Unit 1. Do not confuse these page numbers with those of this *Retrospective.*
Unit One

Item 1

Model responses

1. If it was called ‘Faces of Australia’ there is an insinuation of individuals and differences. To call the set ‘Face of Australia’, a sense of unity is created. It can be clearly seen that there are many different people, however, they are unified by the name ‘Face of Australia’.

2. It is called Face of Australia because it is meant to represent a united country—Australia. Although the different faces show that Australia is made up of many different people, the emphasis is on the country and the people as a whole, not on individuals.

Commentary

This two-star item provided a topical, colourful and interesting beginning to the Short-Response testpaper. Nearly all students attempted the item and most students were awarded a creditable grade.

To respond to this item, candidates needed to develop a hypothesis (CCE 41) and explain that hypothesis to others (CCE 26). Responses that provided a plausible reason for calling the set Face of Australia and explained why this is better than Faces of Australia were awarded an A-grade when the explanation was clearly stated. Explanations not clearly stated were awarded a B-grade, as were responses that provided only a clearly stated plausible reason for calling the set Face of Australia.

The explanation occurring most frequently in A-grade responses was that Face of Australia emphasised the unity of the diverse people who provide the identity of Australia as a nation, whereas Faces of Australia put the emphasis on individuals.

Responses most commonly awarded a C-grade focused on only one aspect of the set of stamps such as the smiling faces or the multicultural aspect. Although aspects of multiculturalism can be seen in the set of stamps, it is only one aspect among many which include age, gender, occupation and pastime.

Most responses awarded an N-grade simply repeated the stimulus material or did not deal with the set of stamps as a whole. It was disappointing to read responses like this that were quite well expressed and sometimes quite lengthy.
**UNIT ONE ITEM 1**

**PERFORMANCE DOMAIN**  |  **41 Hypothesising** |  **26 Explaining to others**
---|---|---

**A**

The response provides a clearly stated plausible explanation for the set of stamps being called *Face of Australia* and not *Faces of Australia*.

**B**

The response provides a plausible explanation for the set of stamps being called *Face of Australia*, and not *Faces of Australia*.

--- OR ---

The response provides a clearly stated plausible explanation for the set of stamps being called *Face of Australia*.

--- OR ---

The response provides a clearly stated plausible explanation for the set of stamps *not* being called *Faces of Australia*.

--- OR ---

The response provides an explanation of how at least one aspect of the set of stamps would indicate that *Face of Australia* is appropriate.

**C**

The response alludes to a plausible explanation for the set of stamps being called *Face of Australia*.

--- OR ---

The response alludes to a plausible explanation for the set of stamps *not* being called *Faces of Australia*.

--- OR ---

The response provides an explanation of how at least one aspect of the set of stamps would indicate that *Face of Australia* is appropriate.

**N**

Response is unintelligible or does not satisfy the requirements for any other grade.

**O**

No response has been made at any time.

**Notes:**

1. An explanation is plausible if it is consistent with known facts and is reasonably acceptable in the context of the item and what we know of the world.
2. A response must deal with the set of stamps as a whole to be awarded a creditable grade.
3. Reference to the fact that the stamps are sold or used singly does not contribute to a creditable grade.
4. If the word ‘faces’ is used when the whole response clearly indicates that ‘face’ was intended, no penalty applies.
5. An explanation for using *Faces of Australia* rather than *Face of Australia* does not contribute to a creditable grade.
6. Reference to the number of faces on each stamp does not contribute to a creditable grade.
7. If the whole response consists only of material given in the stimulus material or the stem, a creditable grade cannot be awarded.

**Model responses:**

1. Calling the set *Face of Australia* suggests that Australia has a unique and recognisable identity as a nation. Calling the set *Faces of Australia* draws attention to the different groups and individuals in the country.
2. It is called *Face of Australia* because it is meant to represent a united country—Australia. Although the different faces show that Australia is made up of many different people, the emphasis is on the country and the people as a whole, not on individuals.
Unit Two

Item 2

The stimulus material for this unit consisted of a photograph of a clock together with an explanation of how the clock displays 24-hour time. The clock, designed by D. Binninger, currently stands outside the Europa Centre in Berlin. The nature of the first two items of the unit prompted the inclusion of a visual aid beside each photograph to assist students who have difficulties distinguishing colours. The way specific colours—red and yellow—are used in the clock display is described in the stimulus material.

Model responses
1. I. The time is 09:48
   II. The time is 18:30

2. I. The time is 09:48
   II. The time is 18:30

Commentary

Item 2 tested a candidate’s ability in interpreting the meaning of pictures/illustrations (CCE 5). Most candidates handled this two-star item well, with 64 per cent of candidates being awarded an A-grade. Only 0.4 per cent of candidates omitted this item. The stimulus material stated that a 24-hour time display consisted of four digits, with the first and last pairs of digits often separated by a colon. To be awarded an A-grade, a candidate had to correctly read the time in both photographs of the clock (or the accompanying visual aid), and write the times in a manner consistent with the stimulus material. Times with four digits and no separation of first and last pairs of digits were consistent with the stimulus material. However, times with four digits with the first and last pairs of digits separated by a decimal point (or any other symbol excluding a colon) were not consistent with the stimulus material, but were eligible for the award of the creditable grade B, D or E.

A significant number of candidates wrote the four required digits for each time, but added ‘a.m.’ or ‘p.m.’ to the time. Provided that the times were unambiguous, such responses were eligible for a B-grade.
# Marking Scheme

## UNIT TWO  ITEM 2

### PERFORMANCE DOMAIN

5 Interpreting the meaning of pictures/illustrations

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Two correct (24-hour) times have been provided in the format of the stimulus material, using four digits in which the first and last pairs of digits may or may not be separated by a colon, namely I. 09:48 (or 0948) and II. 18:30 (or 1830).</td>
</tr>
<tr>
<td>B</td>
<td>One correct (24-hour) time has been provided in the format of the stimulus material, namely one of I. 09:48 (or 0948) or II. 18:30 (or 1830) and either the correct number of hours ('9', '09', '18') or the correct number of minutes ('48', '30') has been given for the other time.</td>
</tr>
<tr>
<td>C</td>
<td>One correct (24-hour) time has been provided in the format of the stimulus material, namely I. 09:48 (or 0948) or II. 18:30 (or 1830).</td>
</tr>
<tr>
<td>D</td>
<td>For both times, the hours have been identified correctly.</td>
</tr>
<tr>
<td></td>
<td>OR</td>
</tr>
<tr>
<td></td>
<td>For both times, the minutes have been identified correctly.</td>
</tr>
<tr>
<td></td>
<td>OR</td>
</tr>
<tr>
<td></td>
<td>One correct identification of hours and one correct identification of minutes have been provided.</td>
</tr>
<tr>
<td>E</td>
<td>One correct identification of either hours or minutes has been provided.</td>
</tr>
<tr>
<td>N</td>
<td>Response is unintelligible or does not satisfy the requirements for any other grade.</td>
</tr>
<tr>
<td>O</td>
<td>No response has been made at any time.</td>
</tr>
</tbody>
</table>

### Notes:

1. A different terminology encompasses the use of such terms as 'am', 'pm', '12 minutes to 10', half past six.
2. For the D- and E-grades, the hours and/or minutes may be expressed using a different terminology, provided that the meaning is clear and unambiguous.
3. Except for the A-grade, there is no demand that the two parts of the response be presented in a consistent format or using the same terminology.

### Model responses:

1. I. The time is 09:48. II. The time is 18:30.
2. I. The time is 09:48. II. The time is 1830.
Item 3

Model response

Use coloured pencils to indicate the lit cells.

Commentary

Again, most candidates handled this two-star item well, with 68 per cent of candidates being awarded an A-grade. This item also had a low rate of omission of 0.4 per cent.

Candidates were required to fill in representations of the clock (CCE 7) to illustrate how two different times (one a.m. time and one p.m. time) would be displayed (CCE 20). The stimulus material indicates quite clearly how two different colours—red and yellow—are used in the display, and candidates were expected to indicate both the configuration of cells which would be lit for a particular time, and the colours which would appear in these cells.

In marking Item 3, the ‘redness’ and ‘yellowness’ of the colours used was considered rather than focusing on a definitive ‘red’ and ‘yellow’. Further, a response which had the correct cells shaded in a manner that distinguished between two colours and also included a legend to indicate which shading represented red and which yellow, was treated as if those cells had been coloured red and yellow. This was done so as not to disadvantage candidates who have difficulties distinguishing colours, or candidates who did not have red and yellow pencils in the selection of coloured pencils they had as part of their essential equipment. Many candidates coloured the bottom row red instead of yellow, particularly for the second of the times. The third cell in the minutes row of the first of the times also caused some candidates problems. They seemed to have generalised ‘red for hours and yellow for minutes’.

In general, the second of the times provided fewer difficulties for candidates. N-grade were rare, with most candidates who attempted the item being able to translate at least the hours or the minutes of one time into the required format. The spare copy of the graphic provided on page 27 of the test booklet was used quite often.
UNIT TWO  ITEM 3

PERFORMANCE DOMAIN  20  Setting out/presenting/arranging/displaying  7  Translating from one form to another

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
</tbody>
</table>
| All relevant cells for both times have been shaded appropriately using red and yellow. | All relevant cells for one time and the relevant cells for either the hours or minutes of the other time have been shaded appropriately using red and yellow. | All relevant cells for one time have been shaded appropriately using red and yellow. | All relevant cells for either
• the hours of both times
• the minutes of both times, or
• the hours of one time and the minutes of the other time have been shaded appropriately using red and/or yellow. | All relevant cells for either
• the hours of one of the times
• the minutes of one of the times have been shaded appropriately using red and/or yellow. |
| OR | OR | OR | OR | OR |
| All relevant cells for both times have been shaded. | All relevant cells for one time and the relevant cells for either the hours or minutes of the other time have been shaded. | All relevant cells for both times have been shaded. | All relevant cells for one time and the relevant cells for either the hours or minutes of the other time have been shaded. | All relevant cells for one of the times have been shaded. |

Notes:

1. If a legend has been used to identify colours, treat the response as if the diagrams have been coloured accordingly.
2. The requirement that cells be ‘shaded appropriately using red and yellow’ should be applied in terms of the ‘redness’ and ‘yellowness’ of writing and marking equipment to which candidates may have had access during the test session.

Model response:

4.16 p.m. 1.07 a.m.
**Item 4**

*Model response*

Explain your answer.

The two possible times are 19:59 and 23:59. If the unlit cell is in either of the bottom rows, the clock would be trying to display 24:54 or 24:58 and neither of these is possible because the clock follows the rules for 24-hour time.

*Commentary*

Item 4, a three-star item, required candidates to investigate possible times that could be displayed by the clock if there was only one cell unlit. Doing this engaged candidates in analysing (CCE 43), inferring (CCE 33) and explaining their findings to others (CCE 26). There were four configurations of lighting which would have one unlit cell—that is one cell in each of the four rows—but two of these would not occur because of the way 24-hour time is displayed.

Many candidates were able to provide four time calculations corresponding to the four configurations that theoretically could result if one cell was unlit. Providing these four times was sufficient for the award of the D-grade. However, higher grades required the two impossible times to be discarded. Explanations for discarding the impossible times, and/or a declaration that the one unlit cell had to be at the end of a row, contributed to higher grades. Just over 15 per cent of candidates were awarded the A-grade. The highest proportion of candidates was awarded the D-grade which suggested that these candidates had not analysed the situation sufficiently to recognise that two of the times they cited would not be represented on the clock.

Some candidates interpreted ‘times of day’ as times during daylight, and concluded that since the valid times were 7.59 p.m. and 11.59 p.m., there could be no times during the day; only ‘times at night’.

There was no requirement for candidates to write times in 24-hour time format, and markers had to deal with a variety of terminologies, including the use of a.m. and p.m., and other variations such as 23:59 being referred to as ‘1 minute to midnight’.

Diagrams often formed part of candidates’ explanations. A diagram was able to provide easy confirmation that the candidate knew that the unlit cell would be at the end of a row.
## Marking Scheme

### UNIT TWO ITEM 4

<table>
<thead>
<tr>
<th>Performance Domain</th>
<th>43 Analyzing</th>
<th>33 Reaching a conclusion which is consistent with a given set of assumptions</th>
<th>26 Explaining to others</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>The response • identifies both of the valid times, i.e. 19:59 and 23:59 • includes no incorrect statements • explains clearly why configurations with the top two rows fully lit (times with a '24' prefix) are to be discarded.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>The response • identifies both of the valid times, i.e. 19:59 and 23:59 • includes no incorrect statements and either • states explicitly that any possible configuration will have one unlit cell at the end of a row or • provides clear recognition that configurations with the top two rows fully lit (times with a '24' prefix) are to be discarded.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>The response • identifies both of the valid times, i.e. 19:59 or 23:59 • includes no incorrect statements.</td>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>The response identifies both of the valid times, i.e. 19:59 and 23:59.</td>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>The response identifies one of the valid times, i.e. 19:59 or 23:59.</td>
<td>OR</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The response states explicitly that any possible configuration will have one unlit cell at the end of a row.</td>
<td>OR</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The response provides clear recognition that configurations with the top two rows fully lit (times with a '24' prefix) are to be discarded.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Notes:

1. Times may be quoted in other than 24-hour time, e.g. 7.59pm rather than 19:59.
2. An error in writing down a time is not considered to be an ‘incorrect statement’.

### Model responses:

1. The two possible times are 19:59 and 23:59. If the unlit cell is in either of the bottom rows, the clock would be trying to display 24:54 or 24:58 and neither of these is possible because the clock follows the rules for 24-hour time.
2. If only one cell is unlit, it has to be the last cell in one of the top two rows. If the last cell in the top row is unlit, 19:59 is displayed. OK. An unlit last cell in the second row means 23:59 shows. OK. However, if both of the top two rows are lit, 24:xx is showing, and the only legitimate time would be midnight, so none of the bottom cells could be lit to show such a time. So if any cells in the last two rows are lit, the clock wouldn’t be displaying 24-hour time as described.
Unit Three

Item 5

Model response

- To provide a statement that makes it clear he does have a winning formula
  ‘if that’s not a winning formula, my name’s Napoleon’

- To provide a statement that makes it clear he does not have a winning formula
  ‘if that’s a winning formula, my name’s Napoleon’

Commentary

In this three-star item, candidates are required to make the smallest possible change to Barry Cohen’s statement in two different cases to clearly indicate two opposite meanings.

To gain an A-grade, candidates were required to give two correct statements, like those in the model response above. There was also another pair of statements which were correct, i.e.

- To provide a statement that makes it clear he does have a winning formula
  ‘if that’s not a winning formula, my name’s not Barry Cohen’

- To provide a statement that makes it clear he does not have a winning formula
  ‘if that’s a winning formula, my name’s not Barry Cohen’

A very common A-grade response contained a mixture of these two pairs. An A-grade was awarded to 36 per cent of candidates, which was a high result on a reasonably difficult item.

Candidates did not always make the minimum change required but their changes still led to the desired result. Candidates either added extra words in the statements or changed the names from Napoleon or Barry Cohen to other implausible identifications, hence a B-grade was awarded to 8 per cent of candidates.
Although the candidates did not need an understanding of formal logic to respond to this item, the key for markers in determining whether a response led to the desired conclusion was an aspect of logic applied to the implication of a statement.

Given that an implication takes the form of ‘IF antecedent, THEN consequent’, there are two valid forms of argument possible:

- modus tollens—denying the consequent, to deny the antecedent
- modus ponens—affirming the antecedent, to affirm the consequent.

Many candidates provided statements which could only be true if invalid forms of argument were employed, such as affirming the consequent or denying the antecedent, e.g. ‘if that’s a winning formula, my name’s not Napoleon’ would be true only if affirming the consequent was valid.

A C-grade was awarded to those who gave one correct statement. It was also given to those who changed the consequent substantially (hence not a minimum change) for both statements, which often made it easier for candidates to follow the logic of the statements through to the desired conclusions, e.g. ‘if that’s not a winning formula, pigs will fly’.

A C-grade was awarded to 20 per cent of candidates.

Many N-responses were possibly due to candidates not answering from the perspective of Barry Cohen. This was stressed in the stem by referring to ‘... change to Barry Cohen’s statement’. This might have caused some to substitute ‘Barry Cohen’ for ‘Napoleon’, which could still gain an A-grade.

The small percentage of O-grades (<1%) indicated that candidates felt that the item was accessible, although writing statements that led to the desired conclusions was quite a challenging task, as expected in a three-star item.
## UNIT THREE  ITEM 5

<table>
<thead>
<tr>
<th>PERFORMANCE DOMAIN</th>
<th>32  Deducing</th>
<th>43  Analysing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The first correct statement is</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- ‘if that’s not a winning formula, my name’s Napoleon’</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>OR</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- ‘if that’s not a winning formula, my name’s not Barry Cohen’.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The second correct statement is</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- ‘if that’s a winning formula, my name’s Napoleon’</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>OR</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- ‘if that’s a winning formula, my name’s not Barry Cohen.’</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| **B**               |             |              |
| Either the first or second statement is correct. |             |              |
| The other statement |             |              |
| - relies on the form of argument that denies the consequent |             |              |
| - leads to the desired conclusion. |             |              |
| **OR**              |             |              |
| Either the first or second statement is correct. |             |              |
| The other statement |             |              |
| - relies on the form of argument that affirms the antecedent |             |              |
| - refers to Napoleon or Barry Cohen |             |              |
| - leads to the desired conclusion. |             |              |

| **C**               |             |              |
| Either the first or second statement is correct. |             |              |
| Each of the first and second statements |             |              |
| either |             |              |
| - relies on the form of argument that denies the consequent |             |              |
| - leads to the desired conclusion. |             |              |
| **OR**              |             |              |
| either |             |              |
| - relies on the form of argument that affirms the antecedent |             |              |
| - refers to Napoleon or Barry Cohen |             |              |
| - leads to the desired conclusion. |             |              |

| **D**               |             |              |
| Either the first or second statement leads to the desired conclusion. |             |              |
| The two statements |             |              |
| - rely on the form of argument that denies the consequent |             |              |
| - use an obviously implausible identification |             |              |
| - lead to the desired conclusion. |             |              |

| **N**               |             |              |
| Response is unintelligible or does not satisfy the requirements for any other grade. |             |              |

| **O**               |             |              |
| No response has been made at any time. |             |              |
**UNIT THREE  ITEM 5**

Notes:

1. If the name Barry Cohen (or an abbreviated form) has been used, it is still a minimal change (a ‘name’ change instead of a ‘not’ change); it is also implausible to suggest that his name is not Barry Cohen. Note the retention of ‘not’ in front of the name, which is appropriate here because it leads to denying the consequent.

2. A response with extra words changed does not satisfy the requirement for minimum change; however, markers should disregard the replacement of apostrophes, e.g. ‘that is’ instead of ‘that’s’, and errors in punctuation and spelling.

3. ‘if that’s not a winning formula, pigs will fly’ is an example of a statement that relies on the form of argument that denies the consequent, and leads to the desired conclusion. It still has an implausible consequent, but it is not based on an identification.

4. If a response has an obviously implausible identification instead of Napoleon and the statements have been changed so they are otherwise correct, then the changes have not been minimal. They do however still rely on denying the consequent and lead to the desired conclusions.

**Background Information**

5. It is a valid form of argument (modus tollens) to deny the consequent, as in ‘if p then q, not q, therefore not p’. So it is valid to argue ‘if that’s a winning formula, my name’s Napoleon’, but the author’s name was not Napoleon, and therefore it’s not a winning formula. It is also a useful rhetorical device for claiming ‘not p’.

6. It is not a valid form of argument to affirm the consequent, as in ‘if p then q, q, therefore p’. So it is not valid to say ‘if that’s a winning formula, my name’s not Napoleon’, and the author’s name is not Napoleon, and therefore it’s a winning formula. It is also not correct to state ‘if that’s a winning formula, my name’s not Napoleon’ because denying the consequent would mean that the author’s name is Napoleon. It is clear from the stimulus that his name is not Napoleon!

7. If a response has an obviously implausible identification instead of Napoleon and the statements have been changed so they are otherwise correct, then the changes have not been minimal. They do however still rely on denying the consequent and lead to the desired conclusions.

While affirming the antecedent is valid, denying the antecedent is not. If the first statement is ‘if my name’s Napoleon, that’s not a winning formula’, it is not correct because it relies on denying the antecedent, i.e. the author’s name is not Napoleon, and therefore it is a winning formula!

Barry Cohen’s original statement was probably based on the two ‘nots’ cancelling, i.e. the statement ‘if that’s not a winning formula, my name’s not Napoleon’ being equivalent to ‘if that’s a winning formula, my name’s Napoleon’. The statement was not correct because it relies on affirming the consequent, which is not a valid form of argument.

**Model response:**

1. ‘if that’s not a winning formula, my name’s Napoleon’

2. ‘if that’s a winning formula, my name’s Napoleon’
Unit Four

General commentary

This unit presented candidates with stimulus material in the form of a menu board from a fish and chips shop. As well as listing individual items with prices, the menu included two party packs at reduced costs for a specified selection of items.

Item 6

Model response

Show your working here.

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Price per Item</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 cod @ $3.50 each</td>
<td></td>
<td>$14.00</td>
</tr>
<tr>
<td>2 calamari @ $4.30 each</td>
<td></td>
<td>$8.60</td>
</tr>
<tr>
<td>4 sea scallop @ $1.50 each</td>
<td></td>
<td>$6.00</td>
</tr>
<tr>
<td>4 potato scallop @ $0.65 each</td>
<td></td>
<td>$2.60</td>
</tr>
<tr>
<td>Large chips @ $5.00 each</td>
<td></td>
<td>$5.00</td>
</tr>
<tr>
<td><strong>Total cost</strong></td>
<td></td>
<td><strong>$36.20</strong></td>
</tr>
</tbody>
</table>

Cost of Party Pack 1: $31.00

Difference in cost: $5.20

Saving made by buying Party Pack 1 is $5.20

Commentary

Candidates were asked to calculate (CCE 16) the savings a customer would make by purchasing Party Pack 1 rather than buying the items in Party Pack 1 individually.

A series of mathematical calculations involving multiplication, addition and subtraction needed to be completed to determine the saving. Most candidates were able to do this successfully, with 86 per cent of candidates being awarded an A-grade. The grade distribution in the marking of this item confirms that candidates are able to make correct mathematical calculations in a familiar practical context.

When candidates were not awarded an A-grade, their working was critical in determining the nature of errors. Three types of error were recognised:

- arithmetic errors, involving miscalculations in multiplication, addition or subtraction
• transcription errors, which involved the incorrect copying of information about a component of Party Pack 1, or incorrect copying of data within the candidate’s calculation

• errors of omission, which occurred when a component of Party Pack 1 was not included in the calculation.

Most candidates followed the direction provided in the cue and consequently provided sufficient working for any such errors to be identified.

The completion rate for this item was extremely high, with only 0.2 per cent of candidates omitting the item. Only 2 per cent of candidates were awarded an N-grade, and in these cases, there was generally either insufficient working to determine the nature of error(s) made, or too many errors had been made to satisfy the requirements of any of the creditable grades.
### PERFORMANCE DOMAIN

#### 16 Calculating with or without calculators

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A</strong></td>
<td>The response cites the total cost of Party Pack 1 items at individual menu prices as $36.20 and gives the correct saving of $5.20.</td>
</tr>
<tr>
<td><strong>B</strong></td>
<td>The response gives the correct saving of $5.20. OR The response shows sufficient working which would have arrived at the correct saving except for a single arithmetic or transcription error.</td>
</tr>
<tr>
<td><strong>C</strong></td>
<td>The response cites the total cost of Party Pack 1 items at individual menu prices as $36.20. OR The response shows sufficient working which would have arrived at the correct saving except for a single arithmetic or transcription error.</td>
</tr>
<tr>
<td><strong>D</strong></td>
<td>The response shows sufficient working which would have arrived at the correct total cost of Party Pack 1 at menu prices except for a single error of omission. OR The response shows sufficient working which would have arrived at the correct total cost of Party Pack 1 at menu prices except for a single arithmetic or transcription error.</td>
</tr>
<tr>
<td><strong>E</strong></td>
<td>The response shows sufficient working which would have arrived at the correct total cost of Party Pack 1 at menu prices except for a single error of omission.</td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>Response is unintelligible or does not satisfy the requirements for any other grade.</td>
</tr>
<tr>
<td><strong>O</strong></td>
<td>No response has been made at any time.</td>
</tr>
</tbody>
</table>
Notes:
1. A single arithmetic error refers to a miscalculation in multiplication, division, addition or subtraction.
2. A single transcription error refers to the incorrect copying of the quantity of a component of Party Pack 1 or to one incorrect copying of data within the calculation.
3. A single error of omission refers to the exclusion of one of the components of Party Pack 1 in the calculations.
4. Where there has been no use of units of currency in the response at any time, grade the response as if a dollar sign ($) had preceded the relevant (creditable) saving or total cost, then apply a penalty of one grade.

Model response:

4 cod @ $3.50 each = $14.00
2 calamari @ $4.30 each = $8.60
4 sea scallop @ $1.50 each = $6.00
4 potato scallop @ $0.65 each = $2.60
Large chips @ $5.00 = $5.00

Total cost $36.20

Cost of Party Pack 1 $31.00

Difference in cost $5.20

Saving made by buying Party Pack 1 is $5.20
Item 7

Model Response

You may respond in any form you find convenient.

1. On the basis of just cost per person, PP1 is $7.75 and PP2 $7.50, making PP1 better value on this basis.

However, the contents’ proportions differ—the amount per person of fish, scallops and potato scallops is the same for both packs, but PP1 provides 6 calamari rings and a small serving of chips per person, whereas PP2 provides only 4 calamari rings but 1.3 small serves of chips. If you like calamari, you’d see PP1 as better value. Because of the amount of chips, PP2 would be more filling, but have a higher carbohydrate (and probably fat!) content. So, PP2 would be better value for a hungry group needing to ‘refuel’. Others might not want to eat that many chips, and the extra chips would amount to waste. If having a choice of fish matters, then PP2 offers this—though PP1 would avoid any arguments about who gets which type of fish, as PP1 has only cod whereas PP2 has a choice of cod or snapper.

Commentary

In this four-star item, candidates were presented with a scenario in which two people were trying to work out which of the party packs represents better value. A simplistic method of determining value suggested by one of the pair is immediately challenged by the anonymous voice of a commentator, who lists a range of issues of potential relevance in determining ‘value’. This commentary also serves to alert candidates to the multidimensional nature of their task, and to establish an expectation that they will engage in the complexity of this thing called ‘value’ in completing their task.

The stem describes this task as being to ‘explore factors and their interplay, and show the conclusions that could be reached’. Significantly, candidates were not asked to state definitively which one pack was better value, but rather to show through their response how the influence of different factors can lead to different conclusions.
In responding to this item, candidates engaged in comparing and contrasting Party Pack 1 with Party Pack 2 (CCE 29) and in judging how better value might be determined (CCE 45). In outlining their explorations, they were explaining to others (CCE 26). The cue gave permission to respond in any format that was convenient thereby overriding the requirement that they respond in sentences in keeping with the default response mode. Despite this, most candidates did use sentences, although a significant number provided tabulated comparisons of the packs. A few candidates presented data graphically.

The four broad issues that candidates were expected to explore and interrelate were:

- cost
- comparative quantities of the two packs
- tastes and preferences
- the appropriate amounts of food/sufficiency/waste,

as outlined in the introductory material to the item.

Fewer than 1 per cent of candidates were awarded an A-grade. Many candidates provided general comments and information rather than actually exploring issues that would influence decision-making. Often, points that were made to demonstrate comparisons between the party packs provided insufficient detail to contribute to the award of higher grades. Quite a few candidates made arithmetic errors hence undermining the basis of their comparative statements.

In exploring the factors, successful candidates established a common basis for comparison. One effective approach was to compare various quantities and costs on a per-person basis. Some candidates chose to make per-person comparisons using four people for Party Pack 1 and six people for Party Pack 2 (as suggested by the menu); others used four people for both, others six people for both. Some used another number again. All such per-person comparisons were able to yield statements that contributed to creditable grades.

While many responses recognised that Party Pack 1 was intended for four people, and Party Pack 2 for six, most candidates did not take into account that there could be waste in the case of too much food, or the possibility of people who are still hungry if there is not enough food.

Many candidates recognised that Party Pack 2 was cheaper per person and that Party Pack 1 saved more ($5.20) off individual menu prices than did Party Pack 2 ($5.00).

Many candidates identified that there was a choice of fish in Party Pack 2. However, it is something of an exaggeration to say that Party Pack 2 offered a much greater and wider variety of food types, since it was only the inclusion of snapper that changed the type of food available.

Although candidates were clearly directed to appropriate criteria on which to base their considerations of comparative value of the party packs, a number of candidates opted to discuss unrelated issues such as preference for foods not on the menu, or foods that they considered should have been in the party packs.
These statements failed to gain credit. Some candidates elected to compare the packs by adding additional items to the first pack to create the equivalent of the second. Such an approach made making valid statements about comparative value difficult.

A significant number of candidates elected to simply restate the information about the party packs listed on the menu board. Data that was simply copied from the menu board failed to contribute to the award of a creditable grade.

As well as their exploration of the issues, candidates were expected to indicate how a decision about better value could be reached. The statements had to be based on the points of comparison that were identified in their response. This did not require a recommendation of one party pack over the other, but rather, needed to show how various differences can point in one direction or another. Those candidates who were able to make meaningful comparisons were generally able to indicate how these would influence a decision about better value.
# Marking Scheme

## UNIT HRUE  ITM5 7

### PERFORMANCE DOMAIN | 29 Comparing, contrasting | 26 Explaining to others | 45 Judging

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
</table>
| The response
- explores factors relating to the four issues
- deals with at least six points of fact
- presents two or more statements about how conclusions about better value between the party packs can be reached, based on the points raised. | The response
- explores factors relating to at least three of the issues,
- deals with at least five points of fact
- presents one or more statements about how conclusions about better value between the party packs can be reached, based on the points raised. | The response
- explores factors relating to at least two of the issues
- deals with at least four points of fact
- presents one or more statements about how conclusions about better value between the party packs can be reached, based on the points raised. | The response
- provides information on factors relating to at least two of the issues
- refers to at least two points of fact
- presents one or more statements about how conclusions about better value between the party packs can be reached, based on the points raised. | The response
- provides information on factors relating to at least one of the issues
- refers to at least two points of fact. |

### Issues
- costs
- comparative quantities
- appropriate amounts/sufficiency/waste
- taste and/or nutritional preferences

### Points of fact in comparing Party Pack 1 and Party Pack 2
- Pack prices cannot be compared directly because components are not in constant ratio
- PP1 has higher actual and/or percentage saving based on individual prices on the menu
- PP1 costs $14 less than PP2
- PP1 costs $7.75 per person (for 4) whereas PP2 costs $7.50 per person (for 6) (OR correct details for specified number(s))
- The quantity of scallops and potato scallops is the same per person (OR correct details for specified number(s))
- PP2 provides more chips per person (1 small serve) than PP1 (1 small serve) (OR correct details for specified number(s))
- PP1 provides more calamari per person (6 rings) than PP2 (4 rings) (OR correct details for specified number(s))
- PP2 offers a choice of fish (cod vs cod and snapper)
- Hunger results if insufficient food for the number of people and/or their appetites is purchased
- Waste occurs if excess or unwanted food is purchased
- PP2 is likely to be higher in carbohydrates than PP1 (more chips)
- PP1 is likely to be higher in protein than PP2 (more calamari)
- Another relevant point

### Points of fact in comparing Party Pack 2
- OR
- NO

### N | O
- Response is unintelligible or does not satisfy the requirements for any other grade.
- No response has been made at any time.
UNIT HRUE ITM5 7

Notes:

1. A response deals with a point of fact when the fact is presented with correct relevant supporting details. A response may have omitted detail when referring to a point of fact, but must have provided sufficient information to make the point of fact clear. For example, a response may refer to the point of fact that PP1 provides more calamari per person than PP2. A response that includes detail that PP1 would provide six calamari rings to each of 4 people, whereas PP2 would provide four calamari rings to each of 6 people has dealt with the same point of fact. A response that deals with a point of fact has necessarily referred to that point of fact. An incorrect statement cannot be treated as dealing with a point of fact, but may contribute to referring to the point of fact, provided that the point of fact is valid.

2. When per person comparisons have been made, assume that the calculations have been made on the basis of PP1 being for 4 people and PP2 being for 6 people, (as given on the menu) unless the response indicates otherwise. Comparisons of the party packs may use either the given numbers (PP1 for 4, PP2 for 6 people) or other specified number(s) of people as the basis for calculations and gain credit according to the marking scheme.

Model responses:

1. On the basis of just cost per person, PP1 is $7.75 and PP2 $7.50, making PP1 better value on this basis. However, the contents’ proportions differ—the amount per person of fish, scallops and potato scallops is the same for both packs, but PP1 provides 6 calamari rings and a small serving of chips per person, whereas PP2 provides only 4 calamari rings but 1.3 small serves of chips. If you like calamari, you’d see PP1 as better value. Because of the amount of chips, PP2 would be more filling, but have a higher carbohydrate (and probably fat?) content. So, PP2 would be better value for a hungry group needing to ‘refuel’. Others might not want to eat that many chips, and the extra chips would amount to waste. If having a choice of fish matters, then PP2 offers this—though PP1 would avoid any arguments about who gets which type of fish, as PP1 has only cod whereas PP2 has a choice of cod or snapper.

2. When trying to determine which party pack would be better value, there are several factors to be considered, such as:

   • How many people will be eating. If there are just 4 people, then from Party Pack 1 they would each get 1 piece of cod, 6 rings of calamari, 1 sea scallop, 1 potato scallop and a ⅛ of a Large chips. In Party Pack 2, they would each get one and a half pieces of fish, 6 calamari rings, one and a half sea scallops, one and a half potato scallops and a ⅛ of an Enormous chips (which is twice as much as ⅛ of a Large chips). If 4 people were eating and not very hungry, Party Pack 1 might be just right. But if 5 or 6 people were eating, Party Pack 2 would be more appropriate, even if a small amount of waste resulted. Many people would rather have some food left over than be left feeling hungry.

   • How much people want to pay. With just 4 people eating Party Pack 2, it will cost $11.25 each, whereas Party Pack 1 would cost 4 people only $7.75 each. If you don’t have a lot of money, it would be cheaper to buy Party Pack 1. It all depends on how hungry the people are. If 6 people tried to share Party Pack 1, there might not be enough food to satisfy their hunger.

   • What do people like? Party Pack 2 would be better if you liked a choice of fish, because it offers both cod and snapper.
Unit Five

Item 8

Model response

The two ways chosen should rely on different scientific considerations.

- I would wear non-slip shoes. This would work because the increased friction would be able to exert enough force to keep me on longer.

- I would also move towards the centre of the disc. This would reduce my speed because I would be travelling a smaller distance in each turn of the disc.

Commentary

In this three-star item, students were asked to analyse (CCE 43) an amusement park ride and devise (CCE 46) two ways to increase the time they could remain on the ride with accompanying reasons as to why these ways would work.

Overall the item was quite well done with 79 per cent of candidates getting a C or better, with less than 6 per cent receiving an N or an O. Males did better on this item with 24 per cent achieving an A, while 6 per cent of females achieved this.

Candidates had little difficulty providing one or two ways that would successfully increase ride duration and many of these were quite ingenious, e.g. linking arms with a group of friends around the apex of the cone. Sometimes candidates mentioned methods which did not provide enough detail to determine whether or not it would actually work. Responses such as ‘lie down’, for example, needed to also say something like ‘… and press down with your hands’ in order for markers to judge if it had a reasonable likelihood of success as a method.

Some techniques were not given credit if they were judged to be non-viable on the grounds of safety or permanent damage to the ride, e.g. using superglue or wearing spiked climbing boots.

Other candidates sometimes mentioned methods which would be spectacularly unsuccessful and would almost guarantee a very brief ride. Some of these methods include—‘lie down on the outside of the ride’ or ‘stand up rather than sit down’.

Although candidates were generally successful at devising ways that would work, providing the accompanying explanations as to why they would work was found to be more challenging. Scientific terminology was often replaced by everyday terms in these explanations. The concept of friction was referenced as stick, grip
or resistance. These were quite acceptable as long as the reason was valid and the intention was clear. Terms such as speed and velocity were used interchangeably as were centrifugal and centripetal. This was acceptable provided the underlying scientific consideration was identified and validly linked to the ‘way’ chosen.

An A-grade was awarded when a candidate described two viable ways and two clearly valid explanations. The C-grade introduced the notion of a satisfactory explanation rather than one that was clearly validated. For example, a common, clearly valid reason for ‘sitting at or near the apex of the cone’ is ‘to reduce your speed so that there is less force acting’. Many students gave a reason as ‘the apex is a long way from the edge so it will take longer to get to the edge’. These candidates demonstrated some insight into the situation but missed the significant reason for gaining the central position on a spinning ride.

Some students confused clockwise and anticlockwise, while others wanted to rely on the slightly less conformist discarding of clothing! Poor expression sometimes made it difficult to determine the candidate’s intention, e.g. ‘lie down on the top with your feet on the outside’.
## UNIT HIRE ITEM 5

<table>
<thead>
<tr>
<th>PERFORMANCE DOMAIN</th>
<th>46 . . . devising</th>
<th>43 Analysing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The response establishes two viable ways that would increase the time spent on the ride. Each way is accompanied by an explanation that clearly validates it. These explanations rely on different scientific considerations.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>B</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The response establishes two viable ways that would increase the time spent on the ride. One way is accompanied by an explanation that clearly validates it. This explanation relies on a scientific consideration. OR. The response establishes two identical (or very similar), viable ways that would increase the time spent on the ride. Each way is accompanied by an explanation that clearly validates it. These explanations rely on different scientific considerations.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>C</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The response establishes two viable ways that would increase the time spent on the ride. OR. The response establishes one viable way that would increase the time spent on the ride. This way is accompanied by a satisfactory explanation as to why it would work. This explanation relies on a scientific consideration.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>D</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The response establishes one viable way that would increase the time spent on the ride.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| **N**              | Response is unintelligible or does not satisfy the requirements for any other grade. |
| **O**              | No response has been made at any time. |
**Marking Scheme**

**UNIT HIRE ITEM 5**

Note:

1. Markers should read both the way chosen and the explanation given, and use one to inform the other.

2. To establish a ‘way’, it is expected that candidates will give sufficient detail to implement the method chosen, e.g. there are numerous ways to ‘sit’ on the ride, so ‘sit’, on its own, does not provide sufficient detail.

3. Viable ways should also satisfy the following contextual assumptions:
   - the ride is not to be damaged
   - the personal safety of the rider and others must be respected.

4. Scientific considerations could include concepts such as friction, centre of gravity, speed, and stability. Force is another, but be wary of it being used too generally.

5. Candidates are not expected to use scientific terminology, e.g. they may use ‘grip’ instead of ‘friction’. Also treat centripetal and centrifugal forces as real and interchangeable.

6. Some ways to increase the time spent on the ride are:
   - Get more skin on the surface (this increases grip).
   - Move closer to the centre (this decreases your speed).
   - Sit at the vertex (forces acting on the body are from opposite directions).
   - Lie as low as possible (increases stability by lowering the centre of gravity).
   - Hold hands with other riders around the vertex (this provides the necessary force inwards).

Model response:

I would wear non-slip shoes. This would work because the increased friction would be able to exert enough force to keep me on longer.

I would also move towards the centre of the disc. This would reduce my speed because I would be travelling a smaller distance in each turn of the disc.
Unit Six

General commentary
Unit 6 highlighted the current interest and concern with the use of ‘babble’, both as popular jargon and as legalistic smoke-screening. The stimulus material sensitised candidates to the concept of ‘babble’ and pointed out some features of both ‘babble’ and plain English.

Item 9

Model response
- Our usual school bus was late. A delay was experienced by the vehicular transport unit designated for the conveyance of we students to our institution of learning.

- The prize-winning dairy cow had twin calves this morning. Between midnight and noon on this current day, the highly acclaimed milk-producing bovine gave birth to duplicate young who had shared her womb during the gestation period.

Commentary
This three-star item required candidates to convert two simple plain English sentences to ‘babble’ (CCE 7) using correct spelling, punctuation, and grammar (CCE 9). Candidates needed to reach a conclusion that was consistent with the assumptions made in the newspaper article (CCE 35). Many candidates were quick to focus on phrases used in the stimulus material, particularly ‘interoperability of intermodal transport systems’ and ‘grain-consuming animal unit’—which were used with varying degrees of success in responses. Some candidates took ‘interoperability’ to mean ‘inoperability’. An unfortunately high number of candidates inappropriately used ‘intermodal transport system’ to replace ‘school bus’ or ‘bus’; however, the newspaper article in the stimulus material indicated clearly that the system referred to more than one mode of transport. However, those resourceful students who modified the term to describe one unit of the system gained credit.

Several candidates showed they have a great future in writing scripts for Yes, Minister. Many others chose a clumsy lengthening of the original sentences. This was variously achieved. Some formed long chains of simple adjectives to replace single words. Others indiscriminately scattered vaguely appropriate (or patently inappropriate) additional words within the simple structures of the original sentences. A significant number opted to embellish the basic facts with wildly
imaginative extrapolation. Others enthusiastically embraced the large-scale replacement of simple words from the original sentences, only to come up with equally simple—though sometimes less appropriate—substitutions.

Many candidates made an attempt to use passive voice. Too often, however, this resulted in a torturous reversal of the sentence structure rather than a successful grammatical change. An obvious attempt at the passive, however, was considered creditable in itself, and candidates were awarded an E-grade if they did nothing more than make this attempt in at least one sentence.

In general, candidates found great difficulty in dealing with the concepts required to construct ‘babble’ alternatives without adding new information or creating inconsistencies with the original sentences. This is, of course, a characteristic of the real ‘babble’ students hear around them.
# Marking Scheme

## Unit Six  Item 9

<table>
<thead>
<tr>
<th>PERFORMANCE DOMAIN</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 Translating from one form to another</td>
<td>The response makes excellent use of opportunities to convert both sentences from plain English to 'babble'. The response has dealt with all concepts. Only minor breaches, if any, in spelling, punctuation or grammar have been made. An attempt to use passive voice has been made in at least one of the sentences. There are no inconsistencies with the original sentences. No extrapolation has occurred. No slang has been used. The 'babble' alternatives present plausible representations of the original sentences.</td>
<td>The response makes good use of opportunities to convert both sentences from plain English to 'babble'. The response has dealt with almost all concepts. Few, if any, errors in spelling, punctuation or grammar have been made. There are no inconsistencies with the original sentences. No extrapolation has occurred. No slang has been used. The 'babble' alternatives present plausible representations of the original sentences.</td>
<td>The response makes some use of opportunities to convert both sentences from plain English into 'babble'. The response has dealt with most concepts. Some lapses in grammar and spelling may have occurred. The partial 'babble' alternatives can be readily linked to words in the original sentences.</td>
<td>The response provides at least partial alternatives in which some simple words have been translated into extended phrases or more complicated words. <strong>OR</strong> An attempt to use passive voice has been made in at least one of the sentences.</td>
<td>The response provides at least two instances of simple words having been translated into extended phrases or more complicated words. <strong>OR</strong> An attempt to use passive voice has been made in at least one of the sentences.</td>
</tr>
<tr>
<td>33 Reaching a conclusion which is consistent with a given set of assumptions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 Using correct spelling, punctuation, grammar</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Responses**

- **N**: Response is unintelligible or does not satisfy the requirements for any other grade.
- **O**: No response has been made at any time.
UNIT SIX  ITEM 9

Note:
1. Where more than one alternative has been provided in the response area of one or both of the plain English sentences, grade the response based on the best alternative offered for each sentence.

Model responses:
1. • Failure to comply with deadlines stipulated in timetable schedules was experienced by the multi-passenger vehicle regularly designated for transporting our group to our educational establishment.
   • Duplicate miniature units were produced by the highly accredited milk-dispensing bovine unit during the first half of the current day.
2. • A delay was occasioned for the transportation unit for multiple passengers habitually engaged for translocation to and from the learning institution that we frequent.
   • Concurrent birthing of dual juvenile bovine siblings was facilitated by the award-winning, milk-producing, grain-consuming bovine unit during the hours before midday today.
**Item 10**

**Model Response**

Ensure that your interpretation is consistent with the passage, but don’t add anything.

Jack and Jill have had to change their housework roster since Jack broke his leg in a motorbike accident. He lost control and collided with a lamp post. Another factor in their chores’ reshuffle is that Jill lost her job as a sales assistant. This happened because sales of the new product were poor. She now hopes to start a course in veterinary science.

**Commentary**

In this item, candidates were asked to rewrite ‘babble’ in plain, grammatically correct English (CCE 9), providing an interpretation (CCE 4) that was consistent with the meaning of the passage and included no embellishment. This entailed using appropriate vocabulary (CCE 10) to condense the ‘babble’ (CCE 11). The stimulus material compares some features of plain English and ‘babble’ and points out that writers of plain English use short words and sentences, active verbs and concise, clear, simple and polite English. It was expected that candidates would apply this advice. The cue advised candidates not to add anything, but many candidates found the temptation to elaborate too inviting.

This four-star item proved very challenging for candidates. Only 1 per cent of candidates were awarded the A-grade. However, these A-grade responses included some outstanding examples of the skilful reduction of pompous verbosity to exemplary plain English.

The A-, B- and C-rades required the main ideas of the passage to be captured. To do this, candidates needed to tie together the changes to household chores sharing with the reasons for such changes—namely, Jack’s accident and Jill’s change in job circumstances. The B-grade allowed two inconsistencies with the passage. The most common inconsistencies cited were that Jill broke her leg, that the vehicle involved in the accident was a car, and that the object hit was a set of traffic lights.

Limited facility with language led to some interesting translations of the passage. In many cases, there was some confusion about who had the accident, and who was injured—this largely derived from misinterpretations of the word ‘former’, which was used to identify Jack in the first paragraph. It is interesting to note that some students took the word to be ‘farmer’ and drew further rural connotations from the passage—even to the point where a tractor was implicated in the accident. Many more responses placed poor Jill at the wheel (or handlebars) of a range of ill-fated vehicles, suffering (or inflicting) serious injuries to (almost) every limb, as a result of collisions with various obstacles. Other interpretations
were less transparent, if equally colourful—with a lollipop lady, various animals and many innocent members of the public sharing the fate of the hapless farmer as they were knocked, killed, relieved of their drivers’ licences, sent to jail, or found to be perpetrators of irresponsible acts against defenceless pets, pedestrians and public property.

Many candidates had difficulty deciphering the details and overall thrust of the second paragraph which outlined Jill’s circumstances. There were interpretations which took ‘modernised product line’ to be a mechanised conveyor-belt system of production; others took ‘consumer purchasing patterns’ to be related to the buying of dress-making patterns. Often a sense of justice pervaded the responses, with retribution (for reckless driving) taking the form of community service orders (often of a veterinary nature), summary dismissals from employment, litigation and marital separations. Alternatively, many candidates found cause to award Jill a promotion, possibly on the basis of misinterpretations of the word ‘superfluous’ as ‘super’, ‘superior’ or ‘successful’. To add to the confusion, ‘domestic maintenance’ was variously (mis)taken to mean motor vehicle maintenance, child maintenance, insurance or domestic violence orders. A large number of responses did pick up on the idea of Jill wanting to retrain as a vet.

Some candidates overrode the stem, and made no attempt to translate the ‘babble’ into plain English, instead merely deleting some of the passage to shorten the given ‘babble’ text. Others, apparently overwhelmed by the set task, simply transcribed the ‘babble’.

‘Babble’ is very common in official and unofficial texts, in the media and on the internet. So the ability to read and interpret ‘babble’ is a useful form of literacy, at least until the tendency to write and speak in babble is less common. The difficulties some Year 12 students had with this item suggest some of the challenges in developing multiple literacies: real world texts are often not presented in forms that are easily read and digested. Perhaps more worrying is the implication from some student responses that some young people may now be so accustomed to ‘babble’ that they think it is plain English.
# Marking Scheme

## UNIT SIX

### ITEM 10

<table>
<thead>
<tr>
<th>PERFORMANCE DOMAIN</th>
<th>4 Interpreting the meaning of words or other symbols</th>
<th>11 Summarising/condensing written text</th>
<th>10 Using vocabulary appropriate to a context</th>
<th>9 Using correct spelling, punctuation, grammar</th>
</tr>
</thead>
</table>

| **A** | A credible and comprehensive interpretation of the passage has been provided. |
|       | The guidelines for writing plain English have been followed closely. |
|       | Few, if any, mistakes in spelling or grammar have been made. |
|       | There has been no embellishment of the passage. |
|       | There are no inconsistencies with the original passage. |

| **B** | A plausible interpretation that captures almost all of the details of the passage has been provided. |
|       | The guidelines for writing plain English have largely been followed. |
|       | Even if some babble has been kept, the interpretation is easier to read than the original passage. |
|       | Few, if any, mistakes in spelling or grammar have been made. |
|       | There has been no significant embellishment of the passage. |
|       | No more than two inconsistencies with the original passage are evident. |

| **C** | An interpretation that captures the main ideas and some details of the passage has been provided. |
|       | An attempt has been made to follow the guidelines for writing plain English. |
|       | Conventions in spelling and grammar have generally been followed. |

| **D** | An interpretation that captures some of the main ideas and some details of the passage has been provided. |
|       | An attempt has been made to follow the guidelines for writing plain English. |

| **E** | At least two words/phrases have been translated from 'babble' to plain English. |

| **N** | Response is unintelligible or does not satisfy the requirements for any other grade. |
| **O** | No response has been made at any time. |
UNIT SIX  ITEM 10

Note:

One reasonable overview of the text of the passage is represented in the following structure diagram.

Model responses:

1. Jack and Jill have had to reshuffle their housework roster. This is because of two events. Firstly, Jack broke his left leg when he accidentally hit a light pole after losing control of his motorcycle. Secondly, Jill was retrenched from her job in sales after her company’s new product was not successful. She is hoping to retrain in the area of veterinary health.

2. Jack and Jill had to reorganise their housework allocations after Jack broke his left leg in a motorbike accident. Jack lost control of the bike and hit a lightpole on a footpath. Added to this, Jill lost her job as a sales assistant after her company’s new product line failed. She now wants to study to be a vet.
Unit Seven

Item 11

Model response

The artist’s impression is verified by the following in the remains:

- the position of the floor, as shown by the rougher bricks below floor level.
- the shape and spacing of the windows.
- the passageway on the right, as evidenced by the indent in the wall, the arches in that area having decayed.
- the number of rows of bricks (or proportions) under the windows.
- the overall shape of the building.
- ‘steps’ on the right.

The features open to question include:

- the shape of the ceiling and its structure.
- the pulpit on the right.
- the stained glass.
- the decayed part on the right does not show the passageway.
- type of flooring.
- the columns supporting the arches.

Commentary

Most candidates made a substantial effort when answering this item and only 1 per cent omitted it. Over 54 per cent received a grade of C or better.

In this item the marking scheme valued:

i. correctly identifying features that ‘could be verified’ (v) and others that were ‘open to question’ (q)
ii. recognising the floor position (and thus visualising the picture as the top portion of the coloured photograph)

iii. identifying a variety of features.

The majority of quality responses made mention of a wide variety of features, while other responses identified features relating to only one part of the building, e.g. windows. By choosing a limited range these responses did not capitalise on the richness of possibilities for comparing and contrasting and visualising (CCEs 29 and 50) in this item.

The floor was able to be verified in the colour photograph in a number of ways, such as ‘approximately 11 bricks below the middle set of windows on the far wall’ or ‘at the position where the dark, rough bricks gave way to the light, smooth ones’. While the majority of students indicated that a floor had once existed, a large number did not detail its position and say how it could be verified. Claims by candidates that the abbey was ‘two storeyed’ without detailing the floor’s position were not awarded credit for this feature. In items such as this, candidates should write down all features, especially ones such as floor position, which some might have deemed too obvious to mention. Inclusion of this one extra feature would have meant the difference of one grade on this item to many candidates, although all grades were achievable (including an A) without specific mention of the floor position.

It was crucial for a good result in this item that candidates look at the picture and find aspects in that picture which they could classify as ‘can be verified’ or ‘open to question’ by examining the coloured photograph. Credit was not given for doing the reverse. Many students attempted to verify the dividing walls or the two bottom windows in the far wall (both features only of the coloured photo) and neither attempt was given credit. One student stated this succinctly as

anything below the floor cannot be verified, obviously, as the picture shows the floor intact.

To gain credit in this item it was necessary for candidates to provide sufficient detail so that markers were able to distinguish the features. To achieve this, candidates needed to be discriminating in their choice of vocabulary. For example, in this item the word ‘balcony’ was used by students for:

- pulpit
- recess/passageway behind the columns on the right hand wall
- the half wall on the right,

and even

- the little rectangular indent on the wall behind the speaker.

Obviously, markers needed sufficient detail from the candidate to know which feature was being referred to. Often markers could not give credit because of this lack of clarity.
Writing on the picture/photograph received no credit unless it was clearly referenced in the response area.

To answer in point form was quite acceptable (and usually desirable) in this item.

Often candidates had difficulty with their ‘left’ and ‘right’. Although ‘on the left’ could be overlooked when students tried to describe the pulpit, it caused statements about other features on the right, such as windows, to be inaccurate.

Disappointingly, many candidates did not use the headings requested in the stem. Although there were no penalties for failing to supply headings, as a general observation, candidates often penalised themselves by not clearly identifying features as ‘can be verified’ or ‘open to question’.

Several candidates ignored the cue ‘Do not refer to people, furnishings or sunlight’.
## UNIT 6EREN  ITEM 77

### PERFORMANCE DOMAIN

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>For six of the features identified,</td>
<td>For five of the features identified,</td>
<td>The response identifies at least four features.</td>
<td>The response identifies two ( v ) from different categories or two ( q ) from different categories.</td>
<td>Response is unintelligible or does not satisfy the requirements for any other grade.</td>
</tr>
<tr>
<td>• all of the ones that can be verified (( v )) come from different categories, and all of the ones that are open to question (( q )) come from different categories</td>
<td>• all of the ( v ) ones come from different categories, and all of the ( q ) ones come from different categories</td>
<td>Of these four, any ( v ) ones come from different categories, and any ( q ) come from different categories</td>
<td>The response identifies at least three features which are ( v ) or ( q ).</td>
<td>No response has been made at any time.</td>
</tr>
<tr>
<td>• there are at least two ( v ) and two ( q ).</td>
<td>• there are at least two ( v ) and two ( q ).</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The possible categories are:
- floor
- windows/doors
- building size/proportions
- floor plan
- roof
- types of materials
- decorative features
- other different features.

**OR**

The response identifies at least six features, which include recognition of the floor position and at least one other \( v \), along with at least two features which are \( q \).

**OR**

The response identifies six features, of which at least two are \( v \) and two are \( q \).

**OR**

The response identifies four features, of which at least one is \( v \) and one is \( q \).

**OR**

The response identifies at least one \( v \) and one \( q \) feature.

**OR**

The response identifies at least three features which are \( v \) or \( q \).
MARKING SCHEME

UNIT 6EREN ITEM 77

Notes:

1. Identifying a feature involves giving sufficient detail about the feature to distinguish it, and making clear whether the feature is one that can be verified (v) or one that is open to question (q). Credit can be given only for those features for which it is clear whether the feature is intended to be v or q.
2. Do not penalise candidates for adding extra incorrect features. Mark the correct ones.
3. Ensure that the features in the picture are verified from what remains today, rather than the reverse.
4. Students who do not recognise the real floor position might list the height of the walls under the windows as open to question.
5. Be flexible in allocating categories, e.g. ‘columns under the window arches’ can go into decorative, windows, or other different categories.
6. Ignore features such as people, furnishings, sunlight, and grass.

Model response:

The artist’s impression is verified by the following in the remains:

- the position of the floor, as shown by the rougher bricks below floor level
- the shape and spacing of the windows
- the passageway on the right, as evidenced by the indent in the wall, the arches in that area having decayed
- the number of rows of bricks (or proportions) under the windows
- the overall shape of the building
- ‘steps’ on the right.

The features open to question include:

- the shape of the ceiling and its structure
- the pulpit on the right
- the stained glass
- the decayed part on the right does not show the passageway
- type of flooring
- the columns supporting the arches.
Unit Eight

General commentary

Most candidates followed the story of Flick Webb and the exposition of his demise from basketball hero to an insignificant, untrained worker with only his past providing any meaning in his life. Items 12 and 13 required interpretation of the poem and in Item 12 most candidates gained some credit for their explication. Sections of the poem are open to a variety of interpretations and candidates demonstrated this in the various descriptions of the effect of Flick’s hands being ‘fine and nervous’ on the lug wrench. However, in Item 13, when candidates were asked to interpret the words of the poem to expose what Flick is seeing in his mind, most of the interpretations shown in the drawings went beyond what was stated in the poem. Some of these responses displayed reasonable extrapolations of what Flick might be daydreaming, but the stem of the item specified that the response was to refer to the last three lines of the poem.

Item 14 required students to go beyond understanding and interpreting the poem and to investigate how the poet has structured the poem and used language to achieve a particular purpose. Unfortunately many candidates seemed to be distracted by the wealth of material in the poem describing the close relationship and concentrated on doing just that—describing the close relationship between the speaker of the poem and Flick—rather than exploring the ways used by the poet to establish the close relationship.

Nearly 60 per cent of responses were not awarded a creditable grade in Item 13 and only 15 per cent were awarded higher than a C-grade in Item 14. This needs careful interpretation. Item 13 asked students to show a picture consistent with the last three lines of the poem. Are students who went well outside this accustomed to the idea that all readings of a text are equally relevant and useful? Item 14 required a focus on language use rather than on themes and content. Is this because students have learned more about how to identify meaning than about how language has been used to convey this meaning?

Item 12

Model response

Flick’s hands are like wild birds on the ball. They move freely, quickly and confidently on the ball as he has a real love of basketball. The ball responds so positively to Flick, it’s almost as though the ball loves Flick. However, Flick’s hands are ‘fine and nervous’ on the lug wrench. He does not feel ‘at home’ with it and the lug wrench has no reaction to him.
This item required candidates to describe and contrast (CCE 29) two relationships. The physical layout of the stem separated the two relationships to clarify what was to be contrasted. The use of ‘and’ in the stem highlighted that it was not just Flick’s relationship with the ball and the lug wrench that was to be considered but also the relationship of the ball and the lug wrench with Flick. Candidates were expected to infer (CCE 33) that a mutual, good relationship existed between Flick and the ball, whilst the lug wrench was indifferent to Flick who handled it with ‘fine and nervous’ hands.

Updike’s description of Flick’s hands in relationship to both the ball and the lug wrench reveal how Flick relates to each. Flick’s hands were ‘like wild birds’ on the ball. He obviously had a good feel for the ball and enjoyed playing with it especially in light of the success he enjoyed. This is contrasted with the description of his hands being ‘fine and nervous’ on the lug wrench. A sense of Flick’s hands not quite feeling ‘at home’ with the lug wrench is portrayed. ‘The ball loved Flick’ confirms the mutuality of the relationship with the ball and the words ‘it made no difference to the lug wrench’ show the lack of reciprocation of the lug wrench.

Many candidates recognised the words used by Updike to describe the relationships and many responses included one or more of the quotes: ‘the ball loved Flick’, ‘his hands were fine and nervous on the lug wrench’ and ‘it made no difference to the lug wrench’. Some responses consisted solely of quotes from the poem. These responses could at best be awarded a D-grade and then only if the quotations clearly exposed the contrast in the relationships.

That Flick’s relationship with the ball was better than his relationship with the lug wrench was acknowledged in many responses. This was commonly indicated by the statement that Flick felt more comfortable or confident with the ball than he did with the wrench. Of the 50 per cent of candidates awarded a B-grade, most responded in this way and included reference to either Flick’s hands or sensitivities.

Many candidates captured how Flick felt towards the ball and the lug wrench. However, they did not deal with how each of these related back to Flick. The feeling of the ball for Flick was given more frequently than the indifference of the lug wrench.
## MARKING SCHEME

### UNIT HIRET  ITHM 56

<table>
<thead>
<tr>
<th>PERFORMANCE DOMAIN</th>
<th>29 Contrasting</th>
<th>33 Reaching a conclusion which is consistent with a given set of assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A</strong></td>
<td>The response captures the mutuality of the relationship between Flick and the basketball, and the indifference or lack of reciprocation of the lug wrench. The response incorporates reference to Flick’s sensitivities/hands. The response makes clear the difference between the two relationships.</td>
<td></td>
</tr>
</tbody>
</table>
| **B**              | The response captures the mutuality of the relationship between Flick and the basketball, and the indifference or lack of reciprocation of the lug wrench.  
 OR  
 The response makes clear that there is a good relationship with the ball and not so good with the lug wrench. The response incorporates reference to Flick’s sensitivities/hands. |
| **C**              | The response makes relevant comment on Flick’s relationship with either the ball or the lug wrench.  
 OR  
 The response captures the indifference or lack of reciprocation of the lug wrench.  
 OR  
 The response makes clear that there is a good relationship with the ball and not so good with the lug wrench. The response incorporates reference to Flick’s sensitivities/hands. |
| **D**              | The response reveals a difference between the relationship of Flick and the ball and the relationship of Flick and the lug wrench.  
 OR  
 The response makes relevant comment on Flick’s relationship with either the ball or the lug wrench.  
 OR  
 The response captures the indifference or lack of reciprocation of the lug wrench.  
 OR  
 The response makes clear that there is a good relationship with the ball and not so good with the lug wrench. The response incorporates reference to Flick’s sensitivities/hands. |
| **N**              | Response is unintelligible or does not satisfy the requirements for any other grade. |
| **O**              | No response has been made at any time. |

**Note:**

Responses that consist of direct quotations (from the poem) only, can be awarded no higher than D-grade.

**Model responses:**

1. Flick’s hands are like wild birds on the ball. They move freely, quickly and confidently on the ball as he has a real love of basketball. The ball responds so positively to Flick, it’s almost as though the ball loves Flick. However, Flick’s hands are ‘fine and nervous’ on the lug wrench. He does not feel ‘at home’ with it and the lug wrench has no reaction to him.

2. Flick is obviously good with the ball, but the ball also ‘loved Flick’, responding to his sensitive hands (‘like wild birds’). The lug wrench, on the other hand, is stolid and unappreciative of Flick’s dexterity. There is no sense that there are ‘good’ lug wrench handlers in the way that Flick is acknowledged by others, and the ball, as a good ball handler.
**Item 13**

*Model response*

I.

![Sketch](image)

Keep the sketch within the frame.

II. Bright, applauding tiers seems to refer to the stands full of brightly dressed people at a basketball game who are cheering for the players (e.g. after scoring a goal).

*Commentary*

In this item candidates were given the opportunity to respond in a different format. The task set for candidates involved focusing on the last three lines of the poem, inferring (CCE 33) what Flick saw in his ‘mind’s eye’, visualising (CCE 50) what this would look like and then translating this image (CCE 7) into a sketch (CCE 60).

The number of responses awarded a creditable grade was extremely disappointing. The 57 per cent of candidates whose responses were awarded an N-grade failed to ascertain what the poem says Flick saw in his mind. These candidates sketched the scene in the luncheonette, the rows of lollies on the wall or a basketballer on a court, whereas the poem clearly indicates that Flick ‘sits and nods’ towards ‘applauding tiers’. The following response is typical of what candidates who were awarded an N-grade produced.
There is no indication in the last three lines that Flick is picturing himself sitting in the luncheonette, playing basketball or any basketball scene other than that of applauding spectators.

Some candidates produced a sketch showing the transition from reality to the imagined. This was generally done by sketching Mae in a blurred manner in front of the applauding tiers or by splitting the response area vertically and showing the scene in the luncheonette shifting into the image in Flick’s mind. If this was clearly discernible in the sketch or declared in Part II it was creditable for grades lower than A.

Responses that indicated the medium, lollies, through which Flick imagined the applauding crowd, used a variety of ways, such as colour, shape or verbal declaration.

As the stem asked for a quick sketch, responses that provided no sketch were given no credit, even if they gave some verbal interpretation of the poem, or the last three lines of it. The quality of sketching techniques was not particularly relevant as candidates were given the opportunity in Part II to declare why they did the sketch the way they did. Frequently, candidates used Part II of the item to provide some analysis of the poem or of the last three lines of it. Such analysis did not always enhance the response and candidates would have been better served by using it for the stated purpose.
### PERFORMANCE DOMAIN

<table>
<thead>
<tr>
<th></th>
<th>33 Inferring</th>
<th>7 Translating from one form to another</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>The sketch is recognisable as one of tiered stands. The view is positioned as Flick would see it from ‘on-court’. The focus of the sketch is a vibrant/applauding crowd of spectators. The medium (lollies) that Flick ‘sees’ through is indicated. The sketch is a defensible translation of what the last three lines of the poem, in the context of the whole poem, suggest Flick sees in his ‘mind’s eye’.</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>The sketch depicts tiered stands. The view is positioned as Flick would see it from ‘on-court’, however clearly indicated transitional features are allowable. The focus of the sketch is a vibrant/applauding crowd of spectators. The sketch is a defensible translation of what the last three lines of the poem, in the context of the whole poem, suggest Flick sees in his ‘mind’s eye’.</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>A sketch relating to some content of the poem is given. Tiered stands are indicated. The focus of the sketch is a vibrant/applauding crowd of spectators. The medium (lollies) that Flick ‘sees’ through is indicated. OR A sketch relating to some content of the poem is given. Tiered stands are indicated. The focus of the sketch is a vibrant/applauding crowd of spectators.</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>A sketch relating to some content of the poem is given. Tiered stands are indicated. The focus of the sketch is a vibrant/applauding crowd of spectators. The medium (lollies) that Flick ‘sees’ through is indicated.</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>Response is unintelligible or does not satisfy the requirements for any other grade.</td>
<td></td>
</tr>
<tr>
<td>O</td>
<td>No response has been made at any time.</td>
<td></td>
</tr>
</tbody>
</table>
UNIT HIRET  ITHM 57

Notes:
1. The whole response (i.e. the sketch and any verbal clarification given) is to be considered when grading.
2. ‘Tiered stands’ refers to tiers of people or lollies depicted as people as spectators at a basketball game.
3. A view that is positioned as Flick would see it from ‘on-court’ would not include any of the following
   • Flick
   • Mae
   • other people depicted prominently.
4. Transitional features of the sketch show the shift from reality to what Flick is seeing in his mind.
5. The medium of the lollies can be indicated by colour, shape or through a combination of these, either in the sketch or in the verbal justification.
6. Responses indicating that the word ‘tiers’ can reflect the concept of ‘tears’, have merit. A sketch that reflects this correspondence between the words is defensible.

Model responses:

First model response

I.

II. I have used the colours of the lollies to show that Flick sees the crowd through them.

The little ‘V’ marks show they are applauding.

Second model response

I.

II. Keep the sketch within the frame.

Keep the sketch within the frame.

I have used the colours of the lollies to show that Flick sees the crowd through them.

The little ‘V’ marks show they are applauding.
**Item 14**

**Model response**

In presenting your findings, don’t overlook the contributions of the first and last stanzas. The first stanza positions Flick in place, but also establishes the speaker as having local knowledge and being on first name terms with the residents.

(Berth, Flick). The speaker is then revealed to be not only an observer of the present, but also a participant in Flick’s past—he was there when Flick racked up 38 or 40 but, perhaps more importantly, he remembers it. Less obviously, the language of the poem supports the speaker’s having a personal connection with the town, and with Flick himself; the speaker uses colloquialisms (‘bucketed’, ‘flats’, ‘hangs around’) and colours his observations with anecdotes (‘A county record still’, ‘once in a while he dribbles an inner tube’). The final lines extend the personal connection to the speaker who not only knows the place, Flick and his history, but even knows Flick well enough to know what he is thinking.

**Commentary**

In this item, candidates were required to analyse (CCE 43) a poem and then give ways in which Updike, the poet, conveys the personal connection between the poem’s speaker and Flick Webb. Many candidates responded to a different task, not this one. Their responses either described the personal connection between the poem’s speaker and Flick Webb or explained that there was a personal connection. Most candidates failed to make clear that they were providing the ways in which Updike conveyed the personal connection.

Responses that did attempt to explain how Updike conveyed the connection very rarely went beyond what is really obvious in a surface reading of the poem. Most candidates were able to identify at least one obvious way in which Updike made it clear that there is a personal connection between the speaker and Flick Webb. The most frequently cited were that the poem’s speaker had a detailed knowledge of the neighbourhood in which Flick worked and that the speaker spoke as if he was present at Flick’s basketball games in the past. Such responses could be awarded no higher than a C-grade.
Very few responses dealt with the textual features of the poem, such as how language was used or the structure of the poem. The use of anecdotes, free verse and colloquialisms are some of the ways that can be shown to support the poet’s intention of presenting a close relationship between the speaker and Flick Webb. In the context of this item, these ways were considered to be more subtle. It was disappointing that so very few candidates showed that they had analysed the textual features of the poem.

The poet, the reader of the poem or some other person was frequently named as having the personal connection with Flick Webb. As the speaker can be the implied author and the reader of the poem could be interpreted as the person who speaks the poem, no penalty was incurred for such responses. Responses that dealt with the personal connection between Mae and Flick or even Pearl Avenue and Flick gained no credit.
# MARKING SCHEME

## UNIT HIRET  ITHM 54

<table>
<thead>
<tr>
<th>PERFORMANCE DOMAIN</th>
<th>43 Analysing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A</strong></td>
<td></td>
</tr>
<tr>
<td>The response presents a wide range of ways in which Updike conveys that the speaker both has and feels a personal connection with Flick. The range encompasses the obvious and more subtle. Reference is made to both the first and last stanzas. All comments are consistent with a reasonable reading of the entire poem.</td>
<td></td>
</tr>
<tr>
<td><strong>B</strong></td>
<td></td>
</tr>
<tr>
<td>The response presents a range of ways in which Updike conveys that the speaker both has and feels a personal connection with Flick. The range encompasses the obvious and more subtle. Reference is made to either the first or last stanza. Most comments are consistent with a reasonable reading of the entire poem.</td>
<td></td>
</tr>
<tr>
<td><strong>C</strong></td>
<td></td>
</tr>
<tr>
<td>The response presents a range of ways in which Updike conveys that the speaker has or feels a personal connection with Flick. Reference is made to either the first or last stanza. Most comments are consistent with a reasonable reading of the entire poem.</td>
<td></td>
</tr>
<tr>
<td><strong>D</strong></td>
<td></td>
</tr>
<tr>
<td>The response provides two ways in which Updike conveys that the speaker has or feels a personal connection with Flick. Reference is made to either the first or last stanza. Most comments are consistent with a reasonable reading of the entire poem.</td>
<td></td>
</tr>
<tr>
<td><strong>E</strong></td>
<td></td>
</tr>
<tr>
<td>The response provides one way in which Updike conveys that the speaker has or feels a personal connection with Flick.</td>
<td></td>
</tr>
<tr>
<td><strong>N</strong></td>
<td></td>
</tr>
<tr>
<td>Response is unintelligible or does not satisfy the requirements for any other grade.</td>
<td></td>
</tr>
<tr>
<td><strong>O</strong></td>
<td></td>
</tr>
<tr>
<td>No response has been made at any time.</td>
<td></td>
</tr>
</tbody>
</table>

### Notes:

1. If the response refers to the poet or another as ‘the poem’s speaker’, no penalty applies.
2. Ways that show that the speaker ‘has’ a personal connection with Flick indicate that the speaker knows him personally. Ways that show that the speaker ‘feels’ a personal connection with Flick indicate that there is an emotional aspect to the relationship.
3. A way is to be considered as subtle when it relies on more than a surface understanding of the poem or poetical devices used. A way is to be considered as obvious when it relies only on surface understanding of the content of the poem or is apparently obvious in relation to other ways given in the response.
1. The first stanza positions Flick in place, but also establishes the speaker as having local knowledge and being on first name terms with the residents (Berth, Flick). The speaker is then revealed to be not only an observer of the present, but also a participant in Flick’s past—he was there when Flick racked up 38 or 40 but, perhaps more importantly, he remembers it. Less obviously, the language of the poem supports the speaker’s having a personal connection with the town, and with Flick himself; the speaker uses colloquialisms (‘bucketed’, ‘flats’, ‘hangs around’) and colours his observations with anecdotes (‘A county record still’, ‘once in a while he dribbles an inner tube’). The final lines extend the personal connection to the speaker who not only knows the place, Flick and his history, but even knows Flick well enough to know what he is thinking.

2. In the first stanza it’s almost as if the speaker is leading you around Flick’s neighbourhood—he obviously shares it with Flick. The detail that the speaker remembers from Flick’s ‘hero’ days could only be known by someone who shared them closely. Updike’s language in the poem establishes the closeness of the connection. He says ‘I saw him’, and ‘But most of us remember anyway’. He gives contrasting statements such as ‘A county record still’ and ‘he just sells gas’ to emphasise that the speaker shares Flick’s disappointment. In the final stanza the speaker is portrayed as someone who shares Flick’s leisure time; knows the exact detail of what he smokes and drinks; and even knows that Flick dreams of his past ‘glory’ days. The poet’s description of Flick as ‘grease-grey and kind of coiled’ shows he sees Flick’s closed-in and boring life.
Unit Nine

Item 15

Model response

Give your answer in terms of the corresponding symbols for the base and perpendicular height.

Area of $P_{38} = 38 \times \frac{1}{2} b_{38}h_{38}$

Commentary

This item required candidates to write an expression for the area of a polygon, based on the formula for the area of a triangle. Candidates were required to use the symbols given. The stimulus material showed that a 4-sided polygon was made up of four triangles, and used terms $b_4$ and $h_4$, and similarly for a 6-sided and a 9-sided polygon. The candidates then had to establish what was required for a 38-sided polygon.

Given that the item was a [★] item, it was not well done. Over one-third of candidates received no credit for this item. A few of the factors that might have contributed to this are:

- Many candidates did not seem to understand the use of subscripts in this context, despite the fact that numerous examples were supplied for the different polygons. It was quite common for candidates to leave the term $b_n h_n$ in their response.
- A significant number of candidates gave a response for one of the triangles of the polygon $P_{38}$, i.e. $\frac{1}{2}b_n h_n$. This was awarded a C-grade.
- Many responses used symbols as directed but decided to override the cue by using other symbols, e.g. ‘ph’ for perpendicular height.
- Many candidates found a numeric solution, e.g. 722, which is $\frac{1}{2} \times 38 \times 38$.

It was quite common for candidates to leave their response as $38(\frac{1}{2}b_n h_n)$ which was acceptable as an A-grade.
UNIT NINE ITEM 65

PERFORMANCE DOMAIN

37 Applying a progression of steps to achieve the required answer
19 Substituting in formulae

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>The answer is given as</td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Area of $P_{38} = 19 b_{38} h_{38}$, or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Area of $P_{38} = \frac{38}{2} b_{38} h_{38}$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The response shows that significant progress has been made towards the correct expression, e.g.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Area of $P_{38} = \frac{n}{2} b_{38} h_{38}$, or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Area of $P_{38} = \frac{38}{2} b_{n} h_{n}$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The answer would have been correct except for one arithmetic error or one error in transcription within the response.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes:

1. A response cannot get an A-grade unless it uses the correct corresponding symbols for the base and perpendicular height. However, for other grades it is acceptable to use a capital instead of the correct small letter in the expression, or to use other terms that have been defined in some way, e.g. perpendicular height replaced by $p$ in an expression.

2. Consider $38 \times \frac{1}{2} b_{38} h_{38}$ as the same as $\frac{38}{2} b_{38} h_{38}$.

Model response:

\[
\begin{align*}
\text{Area of } P_{38} &= 38 \times \frac{1}{2} b_{38} h_{38} \\
&= 19 b_{38} h_{38}
\end{align*}
\]
Item 16

Model response

Use whichever symbols $b_n, h_n, n$ — are needed.

$C \approx n b_n$

Make use of the symbols

$\pi, b_n, h_n, r$ and $n$.

Explain any critical insights.

As $n$ gets larger, (1)

\[ \text{Area of circle} = \text{area of polygon} \]

\[ \text{(negligible difference)} \]

\[ = n \frac{1}{2} b_n h_n \]

\[ = \frac{1}{2} n b_n h_n \quad (2) \]

As $n$ gets larger, $n b_n = 2 \pi r$ (negligible difference) \quad (3)

and $h_n = r$ \quad (4)

\[ \therefore \text{Area of a circle} = \frac{1}{2} \times 2 \pi r \times r \]

\[ = \pi r^2 \]

Commentary

This item centred in the rich history of mathematics and was based on a corruption of Archimedes’ original argument. The challenge in this item was to make the material accessible to all candidates. The concept of negligible difference between the polygon and the circle, as the number of sides of the polygon was made large, was important. It was not suggested that the polygon actually became a circle, regardless of how many sides it might have, but candidates correctly assumed ‘negligible difference’ to mean the polygon and the circle could be considered as the same for the purpose of the item.

Mathematical language was reduced to a minimum, e.g. candidates were asked to ‘discover’ that the area of a circle is $\pi r^2$. Candidates were expected to understand the concepts involved rather than use certain notations. This was a four-star item and as such it was considered to be a challenging item.

To start, candidates were to establish an expression that would approximate the circumference of a circle, based on information given about a polygon with a large number of sides.

Further to this, candidates were required to ‘discover’ that the area of a circle could be given by $\pi r^2$. Very few candidates obtained an A-grade (2.3 per cent) or
a B-grade (3.1 per cent), however 35 per cent were able to recognise or identify one or more of the aspects required.

In the first part, candidates often resorted to the use of $\pi$. Many students identified the more difficult step that $h_n \rightarrow r$, but did not do the rest of the problem as might have been expected. To gain a C-grade candidates would usually establish that $C = nb_n$, equate this to $2\pi r^2$ and repeat the equation $A = n/2 b_n h_n$ from Item 15.

There was a relatively large omit rate (25 per cent for this item). Another 40 per cent of candidates made a response that was not creditable. This needs careful interpretation. The task in this unit does not of itself demand thinking that is too difficult for Year 12 students who successfully completed Year 10 mathematics. The ideas the unit draws on, of the relationship of a circumference and a radius, are a part of our world heritage. What some of these students wrote suggests that there are many students who, when they see an item with anything that suggests mathematics, say to themselves, ‘I can’t do mathematics’, and go straight on without looking at the item. Some students obviously felt that the area of a circle is $\pi r^2$ and therefore there was nothing more to say.

It was interesting to note that some candidates did not get the correct answer in Item 15 but were able to derive a general expression and use it correctly in Item 16.
### UNIT NINE ITEM 67

**PERFORMANCE DOMAIN**

<table>
<thead>
<tr>
<th></th>
<th>22 Structuring/organising a mathematical argument</th>
<th>32 Deducing</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The first response is $n b_n$. The second response clearly shows the four main aspects. (i) Area of polygon $= \frac{n}{2} b_n h_n$ (ii) $n b_n = 2\pi r$ (iii) $h_n = r$ (iv) as $n$ gets larger, and a logical sequence of steps which lead to $\pi r^2$.</td>
<td>The first response is $n b_n$. The second response clearly shows the four main aspects.</td>
<td>The first response is $n b_n$. The second response clearly shows two of the four main aspects.</td>
<td>The first response is $n b_n$. The second response clearly shows one of the four main aspects.</td>
<td>The first response is $n b_n$.</td>
</tr>
<tr>
<td></td>
<td>OR</td>
<td>OR</td>
<td>OR</td>
<td>OR</td>
<td>OR</td>
</tr>
<tr>
<td></td>
<td>The second response clearly shows the four main aspects.</td>
<td>The second response clearly shows two of the four main aspects.</td>
<td>The second response clearly shows one of the four main aspects.</td>
<td>The second response clearly shows three of the four main aspects.</td>
<td>The second response clearly shows one of the four main aspects.</td>
</tr>
</tbody>
</table>

**Notes:**

1. We know that the polygon never becomes a circle—a polygon with a very large number of sides is still not a circle. The item does tell the candidates to treat the difference as negligible, so they may treat the polygon and the circle as the same.
2. Candidates might say $n b_n$ becomes $2\pi r$ and $\frac{n}{2} b_n h_n$ has to become $\pi r^2$ and then try to establish what substitution is required. Pay particular attention to the steps in such responses.
3. Treat $\approx$ and $\approx$ as equivalent.
4. A response cannot gain an A-grade unless the correct symbols are used. For other grades capitals and other symbols may be used as long as the meaning is clear.
UNIT NINE  ITEM 67

Model response:

As \( n \) gets larger, (1)

\[
\text{Area of a circle} \approx \text{area of polygon (negligible difference)}
\]

\[
= n \frac{1}{2} b_n h_n
\]

\[
= \frac{1}{2} n b_n h_n \quad (2)
\]

As \( n \) gets larger, \( n b_n = 2\pi r \) (negligible difference) \( (3) \)

and \( h_n = r \quad (4) \)

\[
\therefore \text{Area of a circle} = \frac{1}{2} \times 2\pi r \times r
\]

\[
= \pi r^2
\]
Unit Ten

General commentary  Although this was the last unit in the Short-Response testpaper and required careful reading of three articles, most candidates attempted the unit and were awarded creditable grades in at least one item. A specialised knowledge of music was not necessary to respond to the three items and candidates did not seem to be distracted by the musical terms used. The three articles are representative in style, diversity and consistency of the kind of material to be found on the internet.

Item 17

Model response  

The one feature of the 1978 discovery that provided conclusive proof that the production of two notes by some ancient Chinese bells was not accidental is the ancient inscriptions on the bells indicating where they were to be struck.

Commentary  

This item required candidates to search and locate information (CCE 52) and then deduce (CCE 32) which one feature of the 1978 discovery provided conclusive proof that the production of two notes by some ancient Chinese bells was not accidental.

Generally, candidates responded well to this item. The number of candidates who could either locate the sole feature that provided conclusive proof (A-grade responses) or found the two features that provided strong evidence (B-grade responses) was pleasing considering the bulk of material presented to candidates in the three articles.

Considering that the stem of the item asks for ‘the one feature’ and the cue is ‘Be specific’, too many candidates included more than one feature in their response or included other irrelevant information.

Although candidates were asked to complete the given sentence, the awarding of grades focused on the information given in the response, not on the sentence construction. Most candidates, however, did complete the sentence acceptably.
UNIT TEN  
ITEM 17

PERFORMANCE DOMAIN

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>The sole feature given is the ancient inscriptions on the bells showing (the two places) where they were to be struck.</td>
</tr>
</tbody>
</table>
| B | The sole feature (of the 1978 discovery) given is strong evidence that the production of two notes was not accidental.  

--- OR ---

More than one feature (of the 1978 discovery) is given including 
• the ancient inscriptions on the bells showing (the two places) where they were to be struck  
AND  
• another feature that at least supports the conclusion that the production of two notes was not accidental. |
| C | The sole feature (of the 1978 discovery) given suggests that the production of two notes was not accidental.  

--- OR ---

More than one feature (of the 1978 discovery) is given including 
• one that is at least strong evidence that the production of two notes was not accidental  
AND  
• another feature of the 1978 discovery. |
| D | A feature (of the 1978 discovery) is given that supports the conclusion that the production of two notes was not accidental.  

--- OR ---

The response alludes to a feature (of the 1978 discovery) that at least suggests that the production of two notes was not accidental. |
| N | Response is unintelligible or does not satisfy the requirements for any other grade. |
| O | No response has been made at any time. |
UNIT TEN ITEM 17

Notes:

1. Features that provide strong evidence are
   • the interval between the two notes *is always* either a major or a minor third
   • the 12 semitones or seven tones (notes) could be produced by the set.

2. Features that *suggest* that the production of two notes was not accidental are
   • *each* bell plays two notes
   • the two notes are sounded by striking a bell at specific spots.

3. A feature that *supports* the statement that the production of two notes was not accidental is
   • distinctive shape of the bells.

4. Pitch, note and tone can be used interchangeably.

5. A five-note scale can be referred to as a pentatonic scale. A seven-note (Western) scale can be referred to as a diatonic scale or an octave.

6. An incomplete statement (e.g. all seven tones) only *alludes* to a feature.

7. Incidental reference to another feature of the discovery (that does not distract from the clear identification of the one feature) should not be considered as providing a second feature, e.g. *The one feature of the 1978 discovery that provided conclusive proof that the production of two notes by some ancient Chinese bells was not accidental is the ancient inscriptions showing where the bells were to be struck to produce the 12 semitones.*

Model response:

*The one feature of the 1978 discovery that provided conclusive proof that the production of two notes by some ancient Chinese bells was not accidental is the ancient inscriptions on the bells indicating where they were to be struck.*
**Item 18**

**Model response**

Describe and explain their reactions. They would have been amazed that ‘their’ Shanxi bells were not mentioned as they had been discovered before the Hubei bells and there had been much discussion about the two notes sounded by the bells. They would also feel more confident, after reading this, that the Shanxi bells were deliberately made to produce two notes.

**Commentary**

In describing and explaining the most likely reactions of the 1977 researchers to the given statement taken from Article 1, candidates needed to empathise (CCE 28) with the researchers and deduce (CCE 32) their reactions.

The majority of responses provided a reaction of some kind. Very few candidates, however, successfully linked the reaction to both of the aspects of the statement most likely to elicit a reaction from the 1977 researchers.

Many responses recognised that the 1977 researchers would react to the statement that no other bells produced two notes. Rather than consider that the reaction would be one of feeling ignored, many responses stated that the 1977 researchers would want to set out to prove that the 1978 researchers got it wrong. This reaction was considered appropriate.

A number of candidates failed to grasp the full context of the item. They either thought that the 1977 researchers were reacting to a statement about a discovery other than their own or they did not realise the significance of the fact that the 1977 discovery preceded the 1978 discovery.

The explanations given were frequently poorly expressed and it was sometimes quite difficult to ascertain exactly which researchers or which discovery was being referred to in the response.
### PERFORMANCE DOMAIN

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>N</th>
<th>O</th>
</tr>
</thead>
<tbody>
<tr>
<td>The response provides an appropriate reaction by the 1977 researchers. The explanation given reveals that • new light had been cast on their debate about whether the Shanxi bells phenomenon was accidental or deliberate • the existence of the Shanxi bells had not been acknowledged. No additional incorrect information is given.</td>
<td>The response provides an appropriate reaction by the 1977 researchers. The explanation given reveals that new light had been cast on their debate about whether the Shanxi bells phenomenon was accidental or deliberate. ——— OR ——— The response provides an appropriate reaction by the 1977 researchers. The explanation given reveals that the existence of the Shanxi bells had not been acknowledged. ——— OR ——— The response indicates that • new light had been cast on the debate about whether the Shanxi bells phenomenon was accidental or deliberate • the existence of the Shanxi bells had not been acknowledged.</td>
<td>The response indicates that new light had been cast on the debate about whether the Shanxi bells phenomenon was accidental or deliberate. ——— OR ——— The response indicates that the existence of the Shanxi bells had not been acknowledged. ——— OR ——— The response provides an appropriate reaction. The explanation given refers directly to the content of the statement but is not adequately grounded in the context defined in the item.</td>
<td>The response provides an appropriate reaction. The explanation given refers to an aspect of the discoveries indirectly associated with the statement.</td>
<td>Response is unintelligible or does not satisfy the requirements for any other grade.</td>
<td>No response has been made at any time.</td>
</tr>
</tbody>
</table>
UNIT TEN ITEM 18

Notes:

1. A reaction can be in the form of emotion, action or inaction.
2. The reaction is appropriate if it is plausible and in keeping with the explanation given in the response.
3. Features defining the context of the item are:
   • researchers reacting to other researchers
   • the 1977 researchers engaging in debate about whether the phenomenon was accidental or deliberate
   • the 1977 discovery preceding the 1978 discovery.
4. Pitch, note and tone can be used interchangeably.
5. A five-note scale can be referred to as a pentatonic scale. A seven-note (Western) scale can be referred to as a diatonic scale or an octave.

Model response:

They would have been amazed that ‘their’ Shanxi bells were not mentioned as they had been discovered before the Hubei bells and there had been much discussion about the two notes sounded by the bells. They would also feel more confident, after reading this, that the Shanxi bells were deliberately made to produce two notes.
Item 19

Model response

1. Make your judgment on the basis of what is said. The discovery showed that the Chinese were using the seven-tone musical scale at the time, not just five tones.

2. It showed that the Chinese had an understanding of metallurgy. 2400 years ago that was not considered to have been developed until the late 18th century.

Commentary

Candidates were required to search and locate information (CCE 52) and then to make a judgment (CCE 45) as to what were the two highly significant implications for our understanding of Chinese history. Most candidates were able to point out the two areas where our understanding of Chinese history might have had to be adjusted in light of the discoveries. For a response to be awarded an A-grade the two implications had to be fully explicated. That is, what was thought to be true needed to be stated as well as what is now known to be true. Only 12 per cent of candidates were able to do this successfully.

The fact that so many candidates could locate at least one of the implications and yet could not explain the implication adequately, could show either little understanding of what an implication is or lack of care in answering the question asked.
### MARKING SCHEME

#### PERFORMANCE DOMAIN

<table>
<thead>
<tr>
<th>UNIT TEN</th>
<th>ITEM 19</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PERFORMANCE DOMAIN</strong></td>
<td></td>
</tr>
<tr>
<td><strong>45 Judging</strong></td>
<td></td>
</tr>
<tr>
<td><strong>52 Searching and locating … information</strong></td>
<td></td>
</tr>
</tbody>
</table>

#### A
- The response provides only the two most significant historical implications
  - that the Chinese used the seven-tone musical scale at the time, not (just) the five-tone scale
  - that the knowledge or execution of metallurgical principles was much more advanced than previously thought.

#### B
- The response includes the implication that the Chinese used the seven-tone musical scale at the time, not (just) the five-tone scale
  - AND
  - alludes to the other most significant implication.

#### C
- The response includes the implication that the Chinese used the seven-tone musical scale at the time, not (just) the five-tone scale.
  - OR
  - The response includes the implication that the knowledge or execution of metallurgical principles was much more advanced than previously thought.
  - OR
  - The response alludes to the two most significant implications.

#### D
- The response alludes to one of the most significant implications.
  - OR

#### N
- The response is unintelligible or does not satisfy the requirements for any other grade.

#### O
- No response has been made at any time.

---

**Notes:**

1. The two most significant implications for our understanding of Chinese history given in the A descriptor are the *only two* where it is clearly pointed out in the articles that a difference occurs with what was thought to have been the case and what was actually the case.
2. An implication must amount to (a) a statement about what is now known to be true and (b) acknowledgment that this differs from what was previously held to be true.
3. A response *alludes* to an implication when the implication is not explicated, e.g. the Chinese used a seven-tone scale.
4. Pitch, note and tone can be used interchangeably.
5. A five-note scale can be referred to as a pentatonic scale. A seven-note (Western) scale can be referred to as a diatonic scale or an octave.

**Model response:**

1. The discovery showed that the Chinese were using the seven-tone musical scale at the time, not just five tones.
2. It showed that the Chinese had an understanding of metallurgy 2400 years ago that was not considered to have been developed until the late 18th century.
## Common curriculum elements tested by short-response items

<table>
<thead>
<tr>
<th>Unit</th>
<th>Item</th>
<th>Common Curriculum Elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Face</td>
<td>1</td>
<td>Hypothesising</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Explaining to others</td>
</tr>
<tr>
<td>2 Clock</td>
<td>2</td>
<td>Interpreting the meaning of pictures/illustrations</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Setting out/presenting/arranging/displaying</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Translating from one form to another</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Analysing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Inferring</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Explaining to others</td>
</tr>
<tr>
<td>3 Logic</td>
<td>5</td>
<td>Deducing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Analysing</td>
</tr>
<tr>
<td>4 Fish and chips</td>
<td>6</td>
<td>Calculating with or without calculators</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>Comparing, contrasting</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Explaining to others</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Judging</td>
</tr>
<tr>
<td>5 Lunar ride</td>
<td>8</td>
<td>… devising</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Analysing</td>
</tr>
<tr>
<td>6 Babble</td>
<td>9</td>
<td>Translating from one form to another</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Inferring</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Using correct spelling, punctuation, grammar</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>Interpreting the meaning of words or other symbols</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Summarising/condensing written text</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Using vocabulary appropriate to a context</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Using correct spelling, punctuation, grammar</td>
</tr>
<tr>
<td>7 Ruins</td>
<td>11</td>
<td>Comparing, contrasting</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Visualising</td>
</tr>
<tr>
<td>8 Updike</td>
<td>12</td>
<td>Contrasting</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Inferring</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>Inferring</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Translating from one form to another</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Visualising</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sketching/drawing</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>Analysing</td>
</tr>
<tr>
<td>9 Archimedes</td>
<td>15</td>
<td>Applying a progression of steps to achieve the required answer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Substituting in formulae</td>
</tr>
<tr>
<td></td>
<td>16</td>
<td>Structuring/organising a mathematical argument</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Deducing</td>
</tr>
<tr>
<td>10 Chinese bells</td>
<td>17</td>
<td>Searching and locating … information</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Deducing</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>Empathising</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Deducing</td>
</tr>
<tr>
<td></td>
<td>19</td>
<td>Judging</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Searching and locating … information</td>
</tr>
</tbody>
</table>
The Writing Task (WT) (Paper 1)

**Commentary**

Students responded well to the theme of work. It is a concrete notion with which they felt familiar and comfortable. Much of the writing reinforced the fact that when students write about what they know personally, they write with sincerity, conviction and authority.

Treatment of the stimulus material in relation to the central issue revealed a pleasing maturity of thought in many of the responses. Students knew where they wanted to take their writing. It did not drift or ramble. They knew not only what they wanted to discuss in their response but also the conclusions or outcomes of this discussion. There was strong focus to the writing. Students know about the notion of work. They have exposure to it. They are involved with it. Thus they did not need to search for a relationship between the stimulus material and central idea. Consequently, for the majority there was considerable exploration of the topic and what it meant, not just a churned-out response regurgitating the stimulus material. There was evidence in their responses of questioning, analysing, reasoning, proposing, arguing and observing.

The overtly pragmatic nature of the testpaper generated both analytical and expository responses. The stimulus material evoked from the students personal responses about work and its meaning for them at this stage of their lives. Many speculated about possible careers. In particular, speculative pieces were written using stimulus piece nine (humans are moulded). Responses were evenly divided between a lament about school forcing them into certain subject choices to fulfil parental and societal expectations of what constitutes a successful career, and the excitement and thrill of unknown challenges ahead. Many who responded to piece six (the door) detailed their experiences of job interviews for part-time work or school-based work experience.

Irrelevant responses this year, rather than being the result of an inability to link the stimulus material to the central idea, were more the direct result of a predetermined choice of response made by students regardless of the stimulus material or theme on the testpaper. Only a very few responses that attempted to combine both the stimulus material and theme were irrelevant. These scripts either tended to digress from the chosen topic or attempted short stories that failed to tie stimulus material in with the notion of work.

The most popular response was the expository piece of writing that either explored, analysed or discussed notions of work. Popular notions that were discussed were: the differences, if any, between work and play or leisure, and work as being enjoyable for certain careers. There was also analysis and discussion of the influence of technology on the workplace and on work ethics. Job satisfaction and the financial benefits of working were also common points for analysis and discussion.

Another popular response was the letter. Most letters were to relatives and friends telling about how busy they were with work, how they liked/disliked their job or how they had found the job of their dreams. Students appear to be handling the
conventions of the letter quite well. Only a limited number of students who attempted this genre did not adhere to its conventions. However, students’ ability to present interesting content was another matter. Its main appeal appears to be to average ability students who, often lacking the confidence and skills to respond in another style, default to the letter: it provides a ready-made structure and sequence for a response.

Interestingly, the speech genre was also a common choice, with speeches being given on the value of work and of how to achieve dreams through work. Many students opted for a motivational format. On the whole this form of writing was used consistently well. Students who used this style were aware, not only of its conventions, but also of its facets: anecdotes, hyperbole, clichés and powerful and concise statements—all were used effectively.

Very few who attempted the short story genre were able to pull it off successfully without a clichéd ending. Sadly, the ‘and then I woke up’ ending is still being used. Most of the short stories attempted rarely seem to be genuine and reactive pieces of writing to the testpaper. They appear to be adaptions of short stories previously written for other assessment. What students need to realise is that a badly written and previously prepared short story that fails to respond to both the stimulus material and central idea on the testpaper will receive a lower mark than another form of writing that is a genuine, spontaneous and relevant response to the testpaper. Short stories should only be attempted by those gifted students who are adept at handling the conventions of this most sophisticated form and can harness this expertise and creativity to respond to sight unseen material.

It is not surprising that given the level of personal identification that students have with work, the most popular piece was piece one (what does work mean to you?). Each statement within the piece gave its own cues for writing and directed students towards a personal reflective response. A high percentage of students who chose this piece wrote about what work means to them. There was much writing about part-time jobs, what they like or dislike about them, and what kind of job they would ideally like. This piece was also used quite often in conjunction with pieces five (in the service of those you care about) and ten (Buffy).

The second most popular piece was piece ten (Buffy). Buffy is an obvious and easily identifiable cultural icon for young adults. Buffy provides a positive role model. Like the students, she juggles the pressures of work and study as well as dealing with the uncertainty of being a teenager on the brink of leaving school and experiencing the ‘real world’. Mirroring the Buffy character, students wrote about the uncertainties they faced in terms of possible career choices and having to juggle work and study during senior school years.

It was pleasing to see that there were very few Buffy narratives or reworking of plots from the Buffy: The Vampire Slayer series. The students seemed to respond more to the text accompanying the Buffy visual than the visual itself. The text gave rise to writing about loving one’s job and being good at it. Many students picked up on the notion of job satisfaction, or lack thereof. Within the genre of magazine articles and interviews this was the most popular piece.

Piece six (the door) and nine (humans are moulded) were equally popular choices. Predictably, students of lesser ability used the prompt offered with this piece of stimulus material as either the introduction or the conclusion for narrative
responses about entering or leaving the workplace, entering a job interview, or entering the boss’s office.

The popularity of ‘human beings are moulded’ was most surprising. Students of all abilities related directly to this piece and explored it on different levels. Students responded with considered and deliberate reflections on education and how it prepares them for careers and the workplace. Other topics such as social conformity, social status, the education system (both secondary and tertiary), government policy and the corporate world were all explored. This piece evoked serious, sensitive and, in many cases, passionate responses. Students exploited the opportunity to express the joy, the frustrations, and the disappointments associated with their 12 years of education.

Pieces three (bakers), five (the service of those you care about), seven (Masai) and eleven (ants) were equally explored. Bakers was a popular piece for students of all ability levels as it allowed them to link the world of technology with the impact it has on the world of work. This piece gave rise to much negatively based futuristic writing. Few students, it seems, believe that a workplace controlled by technology is to be welcomed without reservation. Piece five (in the service of those you care about) was a popular piece for those of lesser ability. Unfortunately, too many of the responses were emotive in delivery. Students should be warned that the need to record the feeling behind a piece of writing should not be done at the expense of the need to produce proficient and purposeful writing.

Piece seven (Masai), when used by itself, evoked narratives about either travelling to Africa for work or relating the experience of interacting with different cultures. However, when used with piece eight (to sport … to work) it produced high-achieving, strong, incisive expository writing on the nature of work. Piece eleven (ants) produced interesting and creative responses. Although many responded with ‘day-in-the-life-of’ narratives, some high-achieving students used the ant world as analogous to our social structures and its embedded hierarchies.

Piece four (time wasting) along with piece eight (to sport … to work) were not popular choices. Time wasting, when attempted, was done so by weaker students as the setting for a historical narrative and did not stimulate a lot of analytical or expository writing. Piece eight seemed to appeal to high-achieving students and was used competently. Students explored the tensions between work and play and the differing interpretations of what constitutes each.

The least popular piece was piece two (weary with toil). The few students who responded to this piece took the opportunity to explore the notion of work as a mental process, as something quite distinct from manual labour. It was also tied in at times with piece nine (humans are moulded) with students making the point that too often schools do not encourage students to think for themselves. It was also used well with piece three (bakers) as illustrative of the fact that technology, by thinking for workers, has resulted in workers being robbed of pride and satisfaction in what is a centuries old tradition and skill. The monotony of work and its detrimental effects were frequently discussed with these pieces.
General comments

For the most part, students endeavour to produce a response directly relevant to the stimulus material and to the central idea on the testpaper on the day.

However, there are some recurring problems with student responses: prepared scripts; plagiarised scripts and choice of the form or style of writing.

The best advice that teachers can give students about preparing for the Writing Task is for the students to be reactive to the testpaper. Students put themselves at a real disadvantage if they use the outline of a previously completed piece of class work as the basis for a response. Students who prepare and memorise responses that are not relevant to the theme are penalised harshly. A completely irrelevant response cannot receive an overall grade higher than the average grade for the attribute *purpose*. Students should respond to what is on the testpaper and write in a form that suits what they want to say. The best writing is fresh, sincere and, regardless of whether it is a positive or negative reaction to the stimulus material (we do not expect everyone to react positively to everything that is on the paper), if the student writes about what he/she is familiar with, the writing reflects this and markers will reward accordingly.

For some students the temptation to plagiarise is irresistible. Perhaps to compensate for a perceived lack of confidence in being able to produce an acceptable piece of writing on the day, some students opt to memorise a piece of writing from another source: a short story; a homily; a children’s story, or most popularly, responses from previous Writing Tasks (published in the *Retrospective*). Students rarely manage to get away with trying to pass off plagiarised writing. Markers are asked to identify any possible cases of plagiarism. Each of these cases is individually investigated and if plagiarism is positively identified, the student is penalised. And, as was noted in last year’s *Retrospective*, the internet has become a very powerful ally in tracking down plagiarism.

Selection of form or style of writing continues to disadvantage students. Too many students choose a familiar form of writing but tend to choose a form that does not always marry with the central idea for their response. A likely reason for inappropriate selection of form is that students have not been taught proficiency in any particular form or style of writing. Data from the random sample project (conducted during the marking operation) and comments from the student panel (held in February, 2000 with the aim of eliciting Writing Task feedback from a group of students) suggests that students are probably exposed to the general conventions of many forms of writing, but at the expense of being able to write with authority in any. Only with the confidence gained from having real command of a range of forms of writing can students go beyond a safe and secure choice that does not adequately showcase their proficiency with the English language. They are unwilling to stray from the formulas they have learned in the classroom about what constitutes an acceptable response for the Writing Task. Most of the students on the feedback panel stated quite clearly that they wrote in the form that their classroom teachers had heard markers would be looking for. In following this path students do not leave themselves open to the stimulus material on the testpaper. It is neither good nor smart test-taking strategy.
Worthwhile test preparation for the Writing Task should (among other things) involve exploration of texts and images to understand the complexities and subtleties of the language used and discussion of how best to exploit the sensitivities inherent in most texts. Students who score high marks are those who take the text and images on the testpaper and respond in a manner that reveals they are open to the nuances of what the stimulus material offers. They then manipulate the same text and images to present a piece of writing with obvious and direct relevance to the stimulus material by way of sophisticated and clear use of language. It is in essence a step beyond a strong … connection to the features of the stimulus material.

The 2000 Writing Task testpaper once again provided students of all ability levels with stimulus material to provoke and elicit a spontaneous response. Each year most students write sincere and honest responses. However, teachers of Year 12 need to equip their students with the skills and, perhaps more importantly, the confidence to present their ideas effectively. To be brave enough to trust in their own ability and to show this ability in the Writing Task.
Criteria and standards schema for marking

There are six criteria: central idea; organisation; relevance; vocabulary; grammar, spelling, punctuation; length. These are clustered within two attributes (*purpose* and *proficiency*), the two attributes being of equal value. The criteria and standards schema as applied by markers appears on the next page.

- Each script is marked four times by four different markers, two for each attribute, *purpose* and *proficiency*.
- Only one mark per marker is given to a piece of writing, but the marking is based on one attribute, that is three specific criteria, without assigning an individual marking to each of the criteria.
- In assigning a mark, a marker balances and trades off between the strengths and weaknesses of each individual script.
- The impact of a single salient feature or criterion is not overly influential on the final decision.
### Proficiency

<table>
<thead>
<tr>
<th>Vocabulary</th>
<th>Grammar, Spelling, Punctuation</th>
</tr>
</thead>
<tbody>
<tr>
<td>controlled (imaginative, discriminating)</td>
<td>precision and understanding of the conventions</td>
</tr>
<tr>
<td>appropriate</td>
<td>lapses in usage intrude but do not distract</td>
</tr>
<tr>
<td>inappropriate</td>
<td>lapses in usage obtrude and detract</td>
</tr>
<tr>
<td>limited</td>
<td>inapt</td>
</tr>
</tbody>
</table>

- The candidate has demonstrated that s/he understands the influence of vocabulary, i.e. the words “fit” the scope of the writing.
- The candidate has consistently demonstrated a command of the principal conventions of the written language, as evidenced by mastery of rules related to subject/verb agreement, dangling participles, antecedent agreement, pronoun choice, tense etc.; correct spelling; correct punctuation.

<table>
<thead>
<tr>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>about 600 (550 – 750) words</td>
</tr>
<tr>
<td>too long (750 – 1000 words)</td>
</tr>
<tr>
<td>far too long (&gt;1000 words)</td>
</tr>
<tr>
<td>too short (450 – 550 words)</td>
</tr>
<tr>
<td>far too short (&lt;450 words)</td>
</tr>
</tbody>
</table>

- The candidate has fulfilled the requirements, i.e. about 600 words.

### Purpose

<table>
<thead>
<tr>
<th>Central Idea</th>
<th>Organisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>identifiable for intended audience; direction and resolution revealed</td>
<td>fluent (transition, flow, continuity, linkages)</td>
</tr>
<tr>
<td>identifiable idea; uneven development</td>
<td>logical or intricate weaving of thoughts (whichever is applicable)</td>
</tr>
<tr>
<td>identifiable idea, poorly developed; or not readily identifiable but some development evident</td>
<td>weaknesses in structuring and sequencing revealed</td>
</tr>
<tr>
<td>not identifiable</td>
<td>weaknesses in structuring and sequencing detract</td>
</tr>
</tbody>
</table>

- A central idea is evident (either explicitly or implicitly) and developed by the candidate.
- The candidate has provided a deliberate structuring of text and an effective sequencing of ideas and images.

<table>
<thead>
<tr>
<th>Relevance</th>
</tr>
</thead>
<tbody>
<tr>
<td>strong (immediate or subtle) connection to features of the stimulus material</td>
</tr>
<tr>
<td>a creditable attempt to connect with features of the stimulus material</td>
</tr>
<tr>
<td>a weak connection to features of the stimulus material</td>
</tr>
</tbody>
</table>

- The writing relates directly to ideas/issues/themes suggested by one or more pieces of stimulus material on the testpaper on the day.
Distribution of coded (uncalibrated) marks for **proficiency**

Distribution of coded (uncalibrated) marks for **purpose**
Selected candidate responses

The collection comprises the scripts of five candidate responses from the 2000 Writing Task subtest. Two of these scripts are the work of students from non–English-speaking backgrounds.

These scripts appear in their original handwritten form. Some contain errors in spelling, punctuation and grammar and, in some cases, factual inaccuracies, but the Board has published them as they were written for the sake of authenticity.

The Board is not expressing a preference for any particular form of writing through its selection of examples, nor are the sentiments expressed in these examples necessarily endorsed by the Board.

The examples that follow met the standards for successful writing as defined by the criteria and standards schema used in the marking of the Writing Task.

Each script was marked four times (two markings for each of two attributes, proficiency and purpose) by four different markers working independently. Therefore, a successful piece of writing may be less than perfect on any single criterion.

Before publication the Board attempted to establish, but cannot guarantee, the originality of candidates’ scripts.

It is probably worth noting that the selected scripts have some added features in common, other than having all been rated highly by markers. The scripts have an immediacy that is the evident result of a direct response to the stimulus material. In being open to what the stimulus material offers, candidates have been able to sustain the reader’s interest throughout and have been rewarded accordingly.
DreamScapes.

Tic... tok... tic... tok...

I watch as the second hand slowly ticks in 5pm, and freedom. The unstimulating blank of the room sweeps inexorably across the non-descript white face, hanging indifferently off the safely neutral beige wall in this grey office building.

I type a string of meaningless letters on my keyboard (beige, again) to satisfy the roaming Greeters—the omnipresent supervisors, sent to subdue the mindless drones.

4:59:55... 4:59:56... 4:59:57... 4:59:58... 4:59:59... 5:00!!

My hasty exit draws curious and sympathetic glances from my fellow zombies, and tangible scorn from the Great Ones.

Out the door, round we go, grab your father and do-si-do!

Down the lift and through the crowd, find your car and—

— why am I in such a hurry? What do I have to rush home to? A silent lounge, a dirty bathroom and an empty bed? I sigh as I turn the ignition.

There has got to be a way out of this life.

............................................................

"Honey, I'm home!" I call out to my refrigerator and television. No reply, save from a gurgle and whirr from the fridge.
"I love you too."

I let out a bitter laugh at my petulness. How lonely must a man be to start talking to whitegoods?

I contemplate the TV, but decide against it. I don’t need perfect people with perfect smiles telling me in perfectly happy tones how I can make my life just that little bit more perfect—just like theirs!—for only $99.95 plus postage and handling. No, thank you.

I think I’ll just go to bed.

My shoes clunk to the floor as I flop wearily onto my bed. The enclosing softness absorbs my aches and pains and sings me a lullaby of feathers and warmth. Slowly, slowly, I feel myself drifting further from consciousness, only by a tenuous gossamer thread that...

The colour of turpentine and dust assaults my nostrils. Who...

My eyes snap open and I find myself in a studio. Along the walls, canvasses splattered with colour and label, each bearing a small black mark in the bottom right corner. I peer closer, and realise with a start that it is my signature. How...

A large slab of marble catches my eye. The rough image
of a face has been hewn into the beautiful grey rock -
an eye, the nose, the curve of a cheekbone. Did I do this
too? I run my fingers over the tools, wondering at their
familiarity. Sandpaper grits against my fingertips
as I pass over it to a delicate chisel and mallet. The
metal and wood sit comfortably in my hands as I raise
them to the marble. Dare I? Could I really sculpt such
a beautiful face?

Instinct takes over as I tentatively chop a wave of hair.
Satisfied, I carve another, and another, creating a swirl
of curls along the hairline. Slowly, carefully, I move
to the mouth; my confidence growing. The mallet thuds
reassuringly against the chisel as I form the lower, sensual
lip; then the upper, moulding a beautiful face from this cold grey stone

I stand back to admire my work. Such a tragedy, that the
beautiful mouth will never know love, nor these eyes behold
the beauty of a sunset. This nose will never twist to
catch a passing aroma, nor will this cold marble skin
chirp the loving touch of a loved one.

I stare at my hands, suddenly wary of their gift. What
right did they have to bring such a beautiful image of
man into being without being able to give them life? I
search the face, seeking imperfections; flaws, any mistake
that would release me from my dilemma. If only I could
undo the labour of my hands, find a way to break this
bond...

My hands rose of their own accord and lift the bust from
its pedestal. It is so beautiful, so delicate, yet so
unmistakenly heavy and solid in my grasp, a contradiction in stone. My eyes slip shut as my hands leave my beautiful Adam’s against the wall.

... BEEEEEEP! “And the smog levels are hitting new highs,” the radio blares at me, “so don’t forget your gas masks! Traffic is at a standstill in the tunnel — geez, what a time to have a 6-car pileup. Talking about crashing, here’s Jerry with the financial news —” BLAM!

My eyes crease open to peer blearily at the digital display. 6:30 am. It’s too early! I wipe my face with my hand, trying to rid myself of the clinging sleep. What did I dream about last night? Something to do with dust... nevermind.

It’s time to go to work.
Idleness

The last note quivers; it hangs in the air in a last defiant sound before fading softly away. It ceases its resonant song and quietly engulfs the space again. Sometimes it feels odd to break this settled silence, but the warm, inviting wood of the guitar has been waiting for a long time. Lying dormant among the assorted junk, it has quietly defended itself to a discordant and useless object. It is of no concern to anyone any more, so it lies among the dozens of forgotten things, collecting dust.

I shiver, unaccustomed to the unusual coolness under the house, my skin prickles and the hairs on my arms stand up like soldiers. Outside, the sun has changed to the fierce glowing orange of late afternoon, but its warmth does not penetrate the wooden palings that border the room. That, if it can be called a room at all; the ceiling is only just high enough to keep the rotting beams hovering over my head. The floor, too, is makeshift. Mostly it is just a fine powdering of ancient dirt, the consistency of icing sugar. It squeezes coolly between my toes and rises in little mushroom clouds when my feet disturb its slumber.

Everything here seems to have a sleepiness about it. Even the insects drone lazily like a tired old man. A march fly buzzes past in anebriated flight, cutting a spiral path through the silent air. It is peaceful here. The hum of the city does not permeate this place; the roaring crowds outside seem barely real. I know the roads are busy now, filling with the peak hour traffic of workers making their weary
journey home. The cars are blocking the arteries of the highways, blotching out a thick smog to blanket the city lights for another night. I can see visualise this scene that is so familiar to me, but I am not part of the monotony.

The ant-like procession of workers continues to dribble down the roads, punctuating the evening with their raucous mechanical cries. Under the house, I sit and ignore the happenings of the outside world. Having known their disease, the fear and inertia that traps them within those wretched confines, I pity them. They will retire to their comfortable suburban homes and watch the news, eat their microwave dinners and retreat to their bedrooms, ready for another day. Except for an indefinable dull ache of emptiness, they will not be aware that they are missing anything.

Caressing the instrument, I run my fingers along the fretboard and gently press on the strings, remembering a distant youth of ambitious stupidity and naive hopefulness. I can feel within it a quiet longing to break free. The picking sunlight is creeping around the edges of the trees, mingling with the shadows and panting an everchanging pattern on the dry brown grass in the backyard. I sit in the faded material of the old squatter chair, knowing that I am wasting valuable time.

Laced with a list of thoughts, my mind flickers and floats among them, lost in a hazy half dream. The guitar case is shrouded in the dust of many years, disturbed only by my curious hands. In a last defiance; I hum out the chords to a song I thought I had forgotten. Softly at
First, hesitant, but then rising to a crescendo of
cascading sound. It echoes and reflects off the wooden walls.

When the twang of the steel strings has subsided, and
silence once again blankets the room, I stand quickly.
Struck by a sudden sickly realisation, I hurry towards
the stairs. I chastise myself; what am I thinking? There
is work to be done for tomorrow, and dishes waiting in the
sink, not to mention tonight is bin night. As I shuffle
hastily through the soft dirt, the last light of day
illuminates the weeds growing in the neglected garden. I
make a mental note of this, and go upstairs to forget
this wasted evening. Tomorrow will be productive. Safely
inside, I lock the doors against the idleness below, and
hastily busily immerse myself in my work.
The Art of Existentialism

Sartre, known as the philosopher of pessimism, states that unless suffering is the ultimate aim of mankind, human must have completely failed their purpose. He argues that because phenomenology is merely the manifestation of the non-sensual will - the underlying reality of existence, then life is essentially futile. He adds that if human proliferation came about as a result of a decision based on pure reason, then mankind would cease to propagate; that generation would be spared the "burden of existence" as the purpose of life is ultimately death or the cessation of the will. Hence before in history this skeptic in human's "negative" (or realist) views have so accepted the impossible explanation for this is that it is because of the mitigating importance or relevance of the arts: music, literature, poetry, visual arts and philosophy in society compensated with a lack of care or empathy towards others. People have been conditioned to study for grades and work for money; therefore the individual, and empathy is endemic in contemporary society. Sartre himself said that two things can elevate a human or humanity from the world of suffering: art and compassion for others.

People, then, have the opportunity and ability to alter the human condition through the work that they do; while there may not be any meaning to life in a discernible spiritual sense, time in existence can be spent fruitfully. Sartre, an existential philosopher outlined two ways people act and react.
to each other. A person can treat another as an object — an "it" — or as another unique individual — an "I-thou". It is surprising to consciously realize how prevalent the former is; every individual at some stage (though probably throughout life) is a number: whether a statistic, a file number, a student number, or a social security number is material. People and institutions are not interested in names, individuality or uniqueness, and while there is a strong argument for remembering people for the sake of practicality, the criticism lies in the fact that people begin to treat other people as though they are numbers as a result of this social conditioning. But there is still hope for humans despite being caught in the embrace of selfishness and the black hole of ideas.

One way to attempt to solve this problem is through education. Schools are designed to be competitive institutions (within and against others): they are ranked, graded and assigned numbers that are supposed to be their ticket to further education or employment. Perhaps if schools altered their focus to the attainment of knowledge, creativity, analytical skills and enjoyment, then good people will emerge from the education system rather than only good students. Perhaps if schools encouraged less conventional subjects to be taught or promoted, such as philosophy, sculpture, drama, art, music (in addition to the traditional academic subjects such as maths, chemistry, physics) and in-
Perhaps schools could arrange overseas travel experiences for students to witness directly the real world. One would have to agree that this would be money well spent, if students could see the poverty and desperation of people living in less developed countries; it would encourage them perhaps to work in an environment where working wages may not be as prolific as in other ways, but where the work itself cannot be evaluated. At least then students would see that not every one has been affected by the computer revolution, that profit need not be the sole motive for work; that life, through work, really can be lived for service.

It may be far too idealistic to imagine a society with a perfect balance of intellectualism, compassion and work for service, but if one cannot have such an ideal, their life, as Schopenhauer argued, is futile. High salaries can only buy material goods; it cannot buy fulfillment, happiness, compassion or soul. Likewise schools cannot educate students to be good people on their own. But if money and time can be used for the aid of others, combined with the skills & knowledge acquired through formal education, then work can be not only nece-
Ordering for oneself, but useful to others.
Non-English students

The following two responses were written by students from non–English-speaking backgrounds.
Response No. 1

My name is Luke, but you can call me what most people call me nowadays, Number Three Hundred Thousand Four Hundred and fifty-six. That is my call number. You see there are so many of us down here that it is too hard to call for Luke, amongst twenty-five thousand here would turn. You have to use the call number. The only people in the entire population not called by their call numbers are the royal family, the Queen, and the Princess. They are called "Queen" and "Princess." I, personally, have never met them before but I heard that the Princess was the most gorgeous thing to ever grace the earth on six legs.

I just graduated, by the way. Fifteen long days of education and now I am stepping up into the working world. I had a choice; either I become a handy peasant to right fellow in the footsteps of the weed or I go for glory and become a soldier! That was a no-brainer so I enlisted and was soon called on to defend the colony against The South Central Colony which was said to be facing population for additional food land and resources for its growing population.

I am young and bright-eyed. A romantic you could say. Anything for my colony. I do not feel as if it were work. I mean as a young citizen growing up we used to fight amongst ourselves all the time and it was just for fun, as well. That is what the army is to me. Just one job after another after another. This was not work. All we ever did was to run around, practice drills, play a few games, work out a bit. I mean none of it was tiring but hell, I would do that just to relieve Today’s battle seems to be just another scheduled battle. We were going to make short work of South Central.

We marched out in nice rows with our bellies high and our teeth sharpened and ready to bite. I wanted to bring along a pack of cards, just in case I got bored. But I thought it would be better to spend my time talking to some of the other soldiers. As we approached the battle
A strange sense of grief overcame me. Suddenly work did not seem as fun as it did before.

The battle was over. However, there were no winners on both sides; casualties were numerous. Something unexpected had happened. A third party had seen the two sides ready to duel and had gotten hold of some poisonous gases and released it at the battle zone. Our number was decimated and it was our job to bury the dead.

I started up to protest. This was not in the job description. Stand up for your army, it said. Defend the queen it said. None did it say bury your friends. None did it say inform the colony of the loss. Work suddenly seemed very tedious indeed. Where was the glory?

Now I had to dig up the ground and dump the bodies of my fellow soldiers. My hands were dirty, the blood and worthy, the decaying bodies of those who had died. No gravestones marked where the bodies lay there.

Nobody even knew who they were or whether they were even of Scout Central’s. Although nobody really cared. It was just work.

When all was clean and cleared, we had to return to the colony. Someone had to tell the people what had happened. We drew lots. I was selected to go and tell them about the disaster. I walked to the palace. I knocked on the door. It opened. Standing inside was the princess and indeed she was stunning. I opened my mouth. I paused. I told her what happened. I paused.

She was also shocked. A look of disbelief was drawn over her lovely and delicate features. She kept it up. I went over to console her. I guess this was part of my job as well. I had to do it. I did not mind.
Response No. 2

"What is it like to die?
In amor et memoria, Anno, luna.
Let me greet her in white conceal.
At once gentle guise brought twinkle.
Do not stand at my grave and cry,
I'm not there, I did not die.
Comfort while she's no comfort,
Passions of late, love, and loyalty
Scene, only of unbreakable peace."

I spent my entire weekend memorising this monologue. I burn all my plans of outings with my friends and I had to cancel an appointment I made with an old acquaintance. I was exhausted as I looked through the thick script that lay before me, daunting and unacquainted. I thought myself on mount expedient, a that one rock climber at the only halfway through my the steep concave looming over me. Yet I enjoyed what I was doing. The task before me, the effort that I put in gave me a great satisfaction and pleasure. I just had to give my best and work through the night, and when I had accomplished that, I would be the proud conqueror, emerging victorious and triumphant, standing at the top of the highest mountain in the world—myself.

That is the most essential part of work, that it challenges your things and heights you were thought possible. Perhaps the most satisfaction one can get in life is doing something he/she enjoys, one that he/she is passionate about. Before getting down and really succeeding, one must appreciate and love what he/she is doing. There is no point in attempting to complete a job if one fails to understand the meaning in it the job's true worth. For me, I can never complete a task if I do not feel anything
for it. Therefore a job has to challenge me to greater heights I have never endeavoured before, and challenge me to accomplish things I never thought were possible. That is what I really call a true job...

I remember the curious brand of anxiety and anticipation as I stepped onto the stage. I thought to myself, ‘well this is it, it’s time I let my hard work pay off’, I began...

The applause was thunderous. My family jumped up and gave me a standing ovation as I made my exit. Even when I went back-stage, the audience continued in their burst of lasting joy. I could not help but allow a deep smile to creep onto my face. A swelling sense of pride in my work overcame me. I was encouraged. I broke into tears when I re-entered the scene and my friends rushed up to stage to greet me with a bouquet of fresh champagne coloured roses (my favourite). My hard work had paid off and I felt a great satisfaction.

Of course, nothing is without its frustrations and heartaches. My director and stage manager were giving me a hell of a headache during the rehearsals. We had many rowdy fits and arguments due to our conflicting ideals and time schedules. Sometimes I had to fit in rehearsals amidst my studies and many other commitments and I often left rehearsals feeling exasperated with the director’s meddling. The director was always complaining that I was not committed enough.

The sweet and bitter memories that accompanied this project gave me a lot to be thankful for, and it opened up my eyes to many things I have never considered before. That is a job. It inspires and teaches you many new things, giving you a lot to ponder on as you leave and move on. This
Script, based on a true story of a death of a young lady. She taught me to treasure the people around me and made me ponder on the meaning of life, giving me an entirely new perspective towards death. It was a job worth my time, and a job that enriched my life in ways I cannot imagine. That was the closing of my job, and I am ready to face another challenge.
Relative worth of each subtest

Relative worth of items on the QCS Test

<table>
<thead>
<tr>
<th>Paper</th>
<th>Worth</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>WT</td>
<td>68.0</td>
</tr>
<tr>
<td>2</td>
<td>MC I</td>
<td>50.0</td>
</tr>
<tr>
<td>3</td>
<td>SR</td>
<td>68.0</td>
</tr>
<tr>
<td>4</td>
<td>MC II</td>
<td>50.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>236.0</td>
</tr>
</tbody>
</table>

*Worth SR paper*

<table>
<thead>
<tr>
<th>Unit</th>
<th>Item No. (pd)</th>
<th>Grade awarded and Code</th>
<th>Worth</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
</tr>
<tr>
<td>1 Face</td>
<td>1</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>2 Kudamm Clock</td>
<td>2</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>3 Logic</td>
<td>5</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>4 Fish and chips</td>
<td>6</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>5 Lunar ride</td>
<td>8</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>6 Babble</td>
<td>9</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>7 Ruins</td>
<td>11</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>8 Updike</td>
<td>12</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>9 Archimedes</td>
<td>15</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>16</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>10 Chinese Bells</td>
<td>17</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>19</td>
<td>6</td>
<td>4</td>
</tr>
</tbody>
</table>

\[ \Sigma \left( \frac{A}{2} \right) = 68.0 \]
**Worth Writing Task**

<table>
<thead>
<tr>
<th>Mark Awarded</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>1*</td>
<td>18</td>
</tr>
<tr>
<td>1</td>
<td>17</td>
</tr>
<tr>
<td>1'</td>
<td>16</td>
</tr>
<tr>
<td>2*</td>
<td>15</td>
</tr>
<tr>
<td>2</td>
<td>14</td>
</tr>
<tr>
<td>2'</td>
<td>13</td>
</tr>
<tr>
<td>3*</td>
<td>12</td>
</tr>
<tr>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td>3'</td>
<td>10</td>
</tr>
<tr>
<td>4*</td>
<td>9</td>
</tr>
<tr>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>4'</td>
<td>7</td>
</tr>
<tr>
<td>5*</td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>5'</td>
<td>4</td>
</tr>
<tr>
<td>6*</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>6'</td>
<td>1</td>
</tr>
</tbody>
</table>

Two markings in each of two attributes (proficiency and purpose), each coded from 1 to 18 yielding a maximum of 72 and a minimum of 4, then two scales are calibrated using item response theory, and combined. The recalibrated scores for a student range from 73.69 (maximum) to 4 (minimum).

<table>
<thead>
<tr>
<th>Aggregated Code for an Attribute</th>
<th>Recalibrated Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Proficiency</td>
</tr>
<tr>
<td>36</td>
<td>37.50</td>
</tr>
<tr>
<td>35</td>
<td>36.91</td>
</tr>
<tr>
<td>34</td>
<td>36.33</td>
</tr>
<tr>
<td>33</td>
<td>33.86</td>
</tr>
<tr>
<td>32</td>
<td>31.69</td>
</tr>
<tr>
<td>31</td>
<td>30.42</td>
</tr>
<tr>
<td>30</td>
<td>29.21</td>
</tr>
<tr>
<td>29</td>
<td>27.96</td>
</tr>
<tr>
<td>28</td>
<td>26.64</td>
</tr>
<tr>
<td>27</td>
<td>25.59</td>
</tr>
<tr>
<td>26</td>
<td>24.68</td>
</tr>
<tr>
<td>25</td>
<td>23.75</td>
</tr>
<tr>
<td>24</td>
<td>22.76</td>
</tr>
<tr>
<td>23</td>
<td>21.73</td>
</tr>
<tr>
<td>22</td>
<td>20.59</td>
</tr>
<tr>
<td>21</td>
<td>19.36</td>
</tr>
<tr>
<td>20</td>
<td>18.17</td>
</tr>
<tr>
<td>19</td>
<td>17.14</td>
</tr>
<tr>
<td>18</td>
<td>16.26</td>
</tr>
<tr>
<td>17</td>
<td>15.50</td>
</tr>
<tr>
<td>16</td>
<td>14.80</td>
</tr>
<tr>
<td>15</td>
<td>14.17</td>
</tr>
<tr>
<td>14</td>
<td>13.58</td>
</tr>
<tr>
<td>13</td>
<td>13.01</td>
</tr>
<tr>
<td>12</td>
<td>12.46</td>
</tr>
<tr>
<td>11</td>
<td>11.87</td>
</tr>
<tr>
<td>10</td>
<td>11.15</td>
</tr>
<tr>
<td>9</td>
<td>10.29</td>
</tr>
<tr>
<td>8</td>
<td>9.10</td>
</tr>
<tr>
<td>7</td>
<td>7.36</td>
</tr>
<tr>
<td>6</td>
<td>4.88</td>
</tr>
<tr>
<td>5</td>
<td>2.50</td>
</tr>
<tr>
<td>4</td>
<td>2.34</td>
</tr>
<tr>
<td>3</td>
<td>2.17</td>
</tr>
<tr>
<td>2</td>
<td>2.00</td>
</tr>
</tbody>
</table>

Relative worth of each subtest
Deemed CCEs and QCS items

Tables showing CCEs tested within the MC and SR papers are presented earlier in this document. There appears next to each item (or unit) one or more CCEs. What does this mean?

The QCS Test assesses candidates in terms of the common elements of the Queensland senior curriculum: reading and writing, analysing and synthesising, evaluating and arguing rationally, graphing, estimating, compiling statistics, and so on. There is not, however, a simplistic match of CCEs and individual items in the QCS Test: exactly one item for each CCE or exactly one CCE for each item. By their nature, some CCEs are obviously widely present—reading, interpreting words and symbols, analysing; others such as graphing may be obviously absent from all but one or two specific items.

The CCE given for an item is not, therefore, a claim that this is the only skill required to complete this item successfully. Nor is it a claim that the CCE should be understood as meaning only the skills apparently required by the item. There may even seem to be ways of completing the item successfully that do not appear to involve the given CCE(s).

The listing of CCEs against items provides information about how the test constructor—the Board—views each item in the context of the particular QCS Test in which it occurs.

Balance of the QCS Test in terms of CCEs

The listing of CCEs against items may suggest that the balance of a particular QCS Test or a series of QCS Tests can be assessed by a tally of the number of times each CCE is listed.

It is wrong to expect such a tally to show an equal number of items for each of the 49 CCEs because they are not, and were not developed to be, either equal, equivalent or, in any other sense, interchangeable.

A reasonable assessment of the balance of the QCS Test will take into account that

- the 49 CCEs are not equal
- no CCE is trivial
- some CCEs are more substantial than others
- no single CCE fails to occur in the Queensland senior curriculum
- some CCEs are diffused generally across a wide range of items (and are therefore not listed frequently)
- some CCEs can only be tested through particular kinds of items which require a substantial proportion of the total test item (and hence these CCEs will not occur very often).
Appendices

Appendix 1: The 49 common curriculum elements

DESCRIPTORS AND NOTES

Note: The numbering system given for the testable Common Curriculum Elements is that used within the Testing Section. Readers should not be perturbed to find that, while the list is in numerical order, there are numbers missing. All 49 elements appear in the list.

1 Recognising letters, words and other symbols:

2 Finding material in an indexed collection:

Note: Examples of an indexed collection: a dictionary, an encyclopaedia, a library catalogue, a road map, an art catalogue, an instruction booklet, a share register, a classified advertisement column.

3 Recalling/remembering:

Note: Consult Test Specifications Section 2.3 to establish what might reasonably be regarded as assumed knowledge, i.e. ‘an elementary level of “general knowledge”, and a knowledge of vocabulary and mathematical operations at a level of sophistication consistent with a sound general Year 10 education ... basic arithmetic operations involved in calculation, also include fundamental mathematical concepts such as simple algebra, percentage, ratio, area, angle, and power of ten notation.’

4 Interpreting the meaning of words or other symbols:

5 Interpreting the meaning of pictures/illustrations:

6 Interpreting the meaning of tables or diagrams or maps or graphs:

7 Translating from one form to another:

Expressing information in a different form.

Note: Translation could involve the following forms:
 verbal information (in English)
 algebraic symbols
 graphs
 mathematical material given in words
 symbolic codes (e.g. Morse code, other number systems)
 pictures
 diagrams
 maps.
9 Using correct spelling, punctuation, grammar:
10 Using vocabulary appropriate to a context:
11 Summarising/condensing written text:
   Presenting essential ideas and information in fewer words and in a logical
   sequence.
   Note: Simply listing the main points in note form is not acceptable, nor is
   ‘lifting’ verbatim from the given passage.
12 Compiling lists/statistics:
   Systematically collecting and counting numerical facts or data.
13 Recording/noting data:
   Identifying relevant information and then accurately and methodically
   writing it down in one or more predetermined categories.
   Note: Examples of predetermined categories are: female/male; odd/even;
   mass/acceleration.
14 Compiling results in a tabular form:
   Devising appropriate headings and presenting information using rows and/
   or columns.
15 Graphing:
   Note: Candidates will be required to construct graphs as well as to interpret
   them (see CCE 6).
16 Calculating with or without calculators:
   Note: Candidates will not be permitted to use calculators that store data
   while turned off.
17 Estimating numerical magnitude:
   Employing a rational process (such as applying an algorithm, comparing by
   experience with known quantities or numbers) to arrive at a quantity or
   number that is sufficiently accurate to be useful for a given purpose.
18 Approximating a numerical value:
   Employing a rational process (such as measuring or rounding) to arrive at a
   quantity or number that is accurate to a specified degree.
19 Substituting in formulae:

20 Setting out/presenting/arranging/displaying:

21 Structuring/organising extended written text:

22 Structuring/organising a mathematical argument:
   Generating and sequencing the steps that can lead to a required solution to a
given mathematical task.

26 Explaining to others:
   Presenting a meaning with clarity, precision, completeness, and with due
regard to the order of statements in the explanation.

27 Expounding a viewpoint:
   Presenting a clear convincing argument for a definite and detailed opinion.

28 Empathising:
   Appreciating the views, emotions and reactions of others by identifying with
the personalities or characteristics of other people in given situations.

29 Comparing, contrasting:
   Comparing: Displaying recognition of similarities and differences and
recognising the significance of these similarities and differences.

   Contrasting: Displaying recognition of differences by deliberate
juxtaposition of contrary elements.

30 Classifying:
   Systematically distributing information/data into categories which may be
either presented to, or created by, the student.

31 Interrelating ideas/themes/issues:

32 Reaching a conclusion which is necessarily true provided a given set of
assumptions is true:
   Deducing

33 Reaching a conclusion which is consistent with a given set of
assumptions:
   Inferring

34 Inserting an intermediate between members of a series:
   Interpolating

35 Extrapolating:
   Logically extending trends or tendencies beyond the information/data given.
36 Applying strategies to trial and test ideas and procedures:

37 Applying a progression of steps to achieve the required answer:
Making use of an algorithm (which is already known by candidates or which
is given to candidates) to proceed to the answer.

38 Generalising from information:
Establishing by inference or induction the essential characteristics of known
information or a result.

41 Hypothesising:
Formulating a plausible supposition to account for known facts or observed
occurrences.
The supposition is often the subject of a validation process.

42 Criticising:
Appraising logical consistency and/or rationally scrutinising for
authenticity/merit.

Note: also critiquing — critically reviewing.

43 Analysing:
Dissecting to ascertain and examine constituent parts and/or their
relationships.

44 Synthesising:
Assembling constituent parts into a coherent, unique and/or complex entity.
The term ‘entity’ includes a system, theory, communication, plan, set of
operations.

45 Judging/evaluating:
Judging: Applying both procedural and deliberative operations to make a
determination.

Procedural operations are those that determine the relevance and
admissibility of evidence, whilst deliberative operations involve making a
decision based on the evidence.

Evaluating: Assigning merit according to criteria.

46 Creating/composing/devising:

48 Justifying:
Providing sound reasons or evidence to support a statement.

Soundness requires that the reasoning is logical and, where appropriate, that
the premises are likely to be true.
49 Perceiving patterns:
Recognising and identifying designs, trends and meaningful relationships within text.

50 Visualising:
Note: Examples of aspects of this element that might be tested include:
visualising spatial concepts (e.g. rotation in space)
visualising abstractions in concrete form (e.g. kinetic theory — the movement of molecules)
visualising a notion of a physical appearance from a detailed verbal description.

51 Identifying shapes in two and three dimensions:

52 Searching and locating items/information:
Note: This element as it occurs in syllabuses usually refers to field work. As these conditions are plainly impossible to reproduce under QCS Test conditions, testing can only be performed at a 'second order' level.

In the sense of looking for things in different places, 'searching and locating items/information' may be taken to include quoting, i.e. repeating words given in an extract in the stimulus material.

53 Observing systematically:
Note: This element as it occurs in syllabuses usually refers to laboratory situations. As these conditions are plainly impossible to reproduce under QCS Test conditions, testing can only be performed at a 'second order' level.

55 Gesturing:
Identifying, describing, interpreting or responding to visual representations of a bodily or facial movement, or expression that indicates an idea, mood or emotion.

Note: This element as it occurs in syllabuses refers to acting and other forms of movement. It is possible to test only the interpretation of movement and expression. It is understood that there are cultural variations relating to the meanings of particular gestures.

57 Manipulating/operating/using equipment:
Displaying competence in choosing and using an implement (in actual or representational form) to perform a given task effectively.
60 Sketching/drawing:

Sketching: Executing simply a drawing or painting, giving essential features but not necessarily with detail or accuracy.

Drawing: Depicting an object, idea or system pictorially, such as in a clearly defined diagram, or flowchart.

*Note: Sketching/drawing does not include the representation of numerical data as required in CCE 14 and CCE 15.*
Appendix 2: Glossary of terms

Source: Manual for the 1999 SR Marking Operation

acceptable minimum standards: the description of a marking process whereby markers are required to use their assessment skills to interpret a candidate response and match it to a standard in each performance domain being tested by the item. Predetermined trade-offs are already incorporated. Markers then award a grade for that performance domain for that item.

adjacent grades: on a short-response marking scheme, a pair of available grades in direct proximity, e.g. A and B, D and E, N and O (see grade)

assumed knowledge: the benchmark of candidates’ required learning in terms of QCS testing; taken to be the possession of both an elementary level of general knowledge and a knowledge of vocabulary and mathematical operations at a level of sophistication consistent with that of a student with a sound general Year 10 education

batched items: a group of items which relate to the same stimulus material

borderline response: a response which is perceived to fall between two available grades

built-in trade-off: a property of a marking scheme that ensures that the performance domains contribute to the grade in a manner reflective of their hierarchical position in that item

calibration: a routine process aimed at controlling reliability loss by removing irregularities in a marker’s judgment ‘gauge’ before that marker is free to ‘gauge standards’, i.e. to mark

certificated marker: a marker who, having successfully participated in a marking operation (short-response or writing task), is issued a certificate by the Board to attest to participation that year

check marking: a process involving scrutiny by immersers and unit managers of grades awarded by markers

closed response item: a short-response item which involves the candidate in the production of an answer and requires the marker to assess the accuracy of the response. This type of item usually produces a definite number of response types.

common curriculum element (CCE): one of the 49 generic skills that are common to at least two subjects in the Queensland senior curriculum, testable in the current format of the QCS Test, and within the learning opportunities of a high proportion of students

creditable response: a response (to a short-response item) which is awarded one of the available grades, A to E, and which thus attracts credit

criterion (also called basket): macroskill. The QCS Test measures achievement in five criteria, each of which is symbolised by a letter of the Greek alphabet:

<table>
<thead>
<tr>
<th>Letter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>α</td>
<td>comprehend and collect</td>
</tr>
<tr>
<td>β</td>
<td>structure and sequence</td>
</tr>
<tr>
<td>θ</td>
<td>analyse, assess and conclude</td>
</tr>
<tr>
<td>π</td>
<td>create and present</td>
</tr>
<tr>
<td>φ</td>
<td>apply techniques and procedures</td>
</tr>
</tbody>
</table>

The 49 common curriculum elements can be distributed amongst these five criteria, each criterion representing a set of related CCEs.

cue: an instruction attached to a short-response item, situated next to the space provided for the candidate response. The cue gives candidates a clear idea of what is required of them, sometimes providing essential further information on how to respond.

curriculum element: identifiable coherent activity specified by a syllabus as relevant to the pursuit of the aims and objectives of that syllabus
**denotation:** descriptor and/or notes related to a CCE, which represent the meaning of that CCE for the purpose of the QCS Test. Denotations are circulated to the appropriate audiences.

**descriptor:** see standard descriptor

**desirable feature:** item-specific characteristic of a candidate’s short response that demonstrates achievement and therefore contributes to the determination of attainment in a particular performance domain

**dimension:** one of nine defined characteristics of a test item. Each item can be classified in terms of each of these nine dimensions. This classification is used for assessing range and balance in the test.

**discrepant marker:** a marker whose marking differences (compared with other markers) are either not acceptably small or not apparently random

**dissonant markings:** binders whose items have been given significantly different marks by different markers

**duple marker:** a marker who has been selected and then trained to mark in a second marking unit

**essential equipment:** ‘tools of the trade’ listed in the Student Information Bulletin and in Directions on the cover of the testpaper, and which the candidate must provide in order to complete the test, viz.

- pens (black ink)
- pencil (for drawing, sketching, etc. but not for writing)
- protractor
- drawing compass
- eraser
- coloured pencils
- ruler
- calculator with spare batteries

**exemplar:** example of a response included in the marking scheme as an indication to markers of the acceptable standard for the award of an A-grade

**flyer:** a written mechanism by which unit managers and immersers can communicate to markers any decisions regarding the treatment of scripts made after marking has commenced

**footnote:** additional information provided at the end of the relevant piece of stimulus material, with reference to the stimulus material via a superscript. It may take the form of a commentary on word usage, sourcing of an extract etc.

**gloss:** definition of a term that candidates are not expected to know. Substantive vocabulary of a high level of sophistication whose meaning cannot be determined from the context is provided at the end of the relevant passage, with reference to the passage via a superscript.

**grade (response grade):** a measure of performance on a short-response item on the basis of a candidate’s response. Grades are consecutive letters, with A denoting the grade pertaining to the highest performance level. The number of grades may vary from item to item. The lowest available grade identifies the threshold for creditable performance.

**hierarchy:** a ranking of the performance domains of an item, indicating their relative contributions to the award of the grades

**immerser:** a person who trains markers before the marking operation, i.e. takes responsibility for immersing markers in the marking schemes of items in one marking unit of the testpaper. During the marking operation the immerser may give advice about problematic responses and running rules as well as conducting calibration and various re-calibration (e.g. re-immersion, redintegration) sessions for markers.
immersion: instruction to acquaint markers with details and subtleties of the marking schemes for the items in an allocated unit; discussion of common response types and marking of real candidate responses

immersion notes: unit-specific script prepared by immersers for use in training markers

immersion session: a set period of time when immersers immerse markers in the marking scheme and provide them with guided assistance in practice marking. Verbal instructions which form part of the marking prescription may be given at this time

incline of difficulty: the sequencing of units within a testpaper in such a way that units tend to become progressively more difficult towards the end of the testpaper

interaction block: a period of time in an immersion session set aside for questions and discussion

introduction: a block of text at the beginning of a unit that, when necessary, gives a reference for the stimulus material and items to follow

item: comprises the stem, cue and response area

item-specific: pertaining to a particular item; usually, item-specific documents contain information which can only pertain to one of the items on a particular subtest

item writer: a person who writes and develops items for inclusion in the itembank. Test specifications are heeded in the writing of items.

key term: one of a list of verbs used in the stems of short-response items as commands or task setters, and for which clear definitions are appropriately circulated to candidates and markers for the purposes of the QCS Test. The key terms include the following:

- account for
- approximate
- argue
- comment on
- compare
- contrast
- derive
- describe
- determine
- discuss
- draw (cf. sketch)
- estimate
- evaluate
- explain
- expound
- express
- extrapolate
- find
- generalise
- identify
- illustrate/exemplify
- indicate
- justify
- list
- outline (in words)
- present
- prove
- rank
- refer
- show (calculations)
- sketch (cf. draw)
- state
- substitute in
- suggest
- summarise
- transcribe
- verify

line numbers: numbers situated in the left-hand margin of some passages of stimulus material to help candidates locate details mentioned in associated items

marker training: a process which occurs during the days immediately preceding the marking proper, and consists of a pretraining/administration session, immersion session(s) in allocated marking unit(s), together with preliminary marking and feedback sessions

marking folio: a collection of marking schemes for all items in the units in which a marker is trained to mark, together with the marker manual. Running rules and flyers are sometimes added to the folio during the course of the marking operation.

marking grid: an item-specific sheet, accompanying the marking scheme, designed to assist markers’ decision making when the application of descriptors is particularly complex. The use of such grids may be either compulsory or non-compulsory.

marking pool: the total group of markers selected from the register of markers to be involved in the marking operation for a given year
marking prescription: the documentation given to markers:

- the item-specific marking scheme
- the number of grades
- an exemplar
- instructions (including verbal instructions), e.g. notes, guidelines, running rules

marking scheme: the item-specific criteria and standards schema from which markers can determine grades; the marking scheme may not include all of the instructions to the markers. Most marking schemes are presented as a table in which the cells of each column give the descriptors of standards for the grade shown in that column’s heading.

marking unit: a collection of items that is to be marked using a single marksheet. An individual marking unit may include items from more than one test unit. The items of an individual test unit may be spread over more than one marking unit.

marksheet: the preprinted light- and mark-sensitive sheet which markers use to record information about marking, using barcodes and pencils. There is one marksheet per marking unit per 24 students per single marking.

mathematical operations: at the level of QCS testing, the basic operations involved in calculation (addition, subtraction, multiplication, division), as well as fundamental mathematical concepts such as simple algebra, percentage, ratio, area, angle, and power of ten notation

miniature SR paper: an enclosure in the testpaper containing abbreviated versions of the items in the testbook. Candidates may retain this at the conclusion of the test.

model response: an example of a response that demonstrates the highest level of performance and which would invariably be awarded the highest grade

monitoring (marker monitoring): comparison of markers (many pairings) to identify responses to be re-marked, markers who require redintegration, and aspects of marking schemes which need attention during calibration

most noticeable difference: the feature of a response which is targeted when a borderline response is marked

mover: a marker who is directed to move from the room in which s/he is marking to another, regardless of whether or not the original room contains scripts in her/his marking unit and colour. Such moving of markers supports marker monitoring by helping to ensure that no two markers marking the same items mark a large number of folders in tandem.

non-contributory: term applied to the grade given to a short-response item when a response is unintelligible or does not satisfy the requirements for any other grade (N), or when the item is omitted (O)

notes: a note on a marking scheme that: clarifies features of the item; defines, qualifies or explains terms used in the descriptors; gives additional information about the treatment of particular types of response

omit: label given to that category of response to a test item where the candidate fails to provide a response; that is, the candidate makes no apparent attempt to respond to the task set and leaves the response space completely blank

open-ended response item: a short-response item which involves the candidate in generative thinking and requires the marker to assess the quality of the response. No exhaustive list of desirable features can be identified a priori to describe a given response type.
optional equipment: ‘tools of the trade’ (other than essential equipment) normally used in a course of study, which candidates may choose to provide for the test, e.g.

- set square
- correction fluid
- template
- sharpener

pathological response: one of the 2 per cent or less of different or unpredictable responses not covered directly by the descriptors in the marking scheme, and discovered after marking commences.

performance domain(s): common curriculum element(s) tested by a particular item. For items which are associated with more than one CCE, the influence of each CCE is clearly evident in the marking scheme.

practice effect: the sensitivity of marking speed to an increase with marker experience in reading candidate responses and using the marking scheme to grade them.

practice set: booklet of authentic candidate responses given to markers within an immersion session to reinforce learning.

preliminary marking: mandatory initial session of actual marking conducted under normal conditions with grades to stand. Preliminary marking usually occurs immediately following immersion and prior to the feedback session.

primary marking: the totality of the first two independent markings of all items on the test paper. The number of marker judgments in the primary marking is \( \sum_{i=1}^{n} p_i \), where \( N = \) number of candidates, \( n = \) number of items on the test paper, and \( p_i = \) number of performance domains for the \( i \)th item.

redintegration: a one-on-one counselling session between an immerser and a marker who is experiencing problems with his/her marking, as identified by quality control procedures.

referee marking: an independent third marking of a candidate response which occurs when two independent markers disagree to an extent which is regarded as significant for that item.

registered marker: a marker who has successfully trialled at and completed a recruitment session but has not yet had the opportunity to demonstrate successful participation in a marking operation.

re-immersion: further immersion for markers who have experienced problems with marking, as identified by the marker monitoring process (also see redintegration).

reliability: the degree to which measurements are consistent, dependable or repeatable; that is, the degree to which they are free of errors.

reliability of grades: the degree to which there is marker agreement as to the grade awarded (although some grades are truly borderline).

response: the candidate’s work on an item as communicated to the marker. In writing, drawing, calculating and so on in the case of a short-response item. By blackening a circle corresponding to the selected response option in the case of a multiple-choice item.

response alternative: one of four options from which candidates choose the best response for a multiple-choice item. Candidates record their responses on a mark-sensitive sheet which is computer scanned for scoring.

response area: the space provided in the short-response testbook where candidates give their response. It may be a ruled area or grid, a designated space in which to write, draw, complete a diagram, fill in a table, etc.
retraining: the process which allows markers to be allocated to an additional marking unit and immersed in it, in the event that projected marking rates demand it

richness: a property of a test item whereby the item can provide more than the usual single piece of information about candidate achievement. In the case of a rich short-response item, markers are required to award a grade in more than one, usually two, performance domains.

running rules: decisions made by unit managers and immersers after the marking has commenced to supplement the application of marking schemes

sample response: authentic candidate response used for the purposes of training

second guessing: anticipating the grade selected by other markers by considering ‘What will other markers do?’ rather than by applying the marking scheme

single marker: a marker who has been trained to mark in only one marking unit

standard: a reference point for describing the quality of candidate responses in performance domains (see marking scheme)

standard descriptor: a statement or list of statements that succinctly conveys the standard or features required in a response to be awarded that grade in a particular performance domain

star-value: a rating for a short-response item relative to other items on the short-response paper, in terms of worth/effort, from [*] lowest to [*****] highest. The star-value is printed beside the item number.

stem: that part of the item which indicates the task set or the question to be answered

stimulus material: verbal, numerical, pictorial, tabular, or graphical material that sets the context for the item(s) to follow with the aim of promoting candidates’ responses

testbook (testpaper): the booklet provided to a student for the subtest; the cover carries directions to candidates; the booklet contains x items numbered 1 to x arranged within y units. x and y may differ from year to year but are typically 25 and 10. The booklet also contains blank pages (should the candidate require extra response space, or elect to rewrite a response after cancelling the initial attempt) and a fold-out section inside the back cover containing the item and star-value distribution.

trade-off: see built-in trade-off

training: see marker training

unit: a part of test construction consisting of stimulus material and associated items and, often, an introduction

unit manager: a test developer who trains the immersers of a particular unit so that they can train the markers with due regard to the construct of the test

validity: the extent to which an assessment instrument measures what it is claimed to measure

validity of grades: the extent to which the item and marking scheme measure achievement in the designated CCE(s)

verbal instructions: information given to markers by immersers to acquaint them with the details and subtleties of marking schemes, and with common response types gleaned from a sample of candidate responses