

Level 2 Award

Thinking and Reasoning Skills

Unit 1 **B901**: Thinking and Reasoning Skills

OCR Level 2 Award

Mark Scheme for June 2014

OCR (Oxford Cambridge and RSA) is a leading UK awarding body, providing a wide range of qualifications to meet the needs of candidates of all ages and abilities. OCR qualifications include AS/A Levels, Diplomas, GCSEs, Cambridge Nationals, Cambridge Technicals, Functional Skills, Key Skills, Entry Level qualifications, NVQs and vocational qualifications in areas such as IT, business, languages, teaching/training, administration and secretarial skills.

It is also responsible for developing new specifications to meet national requirements and the needs of students and teachers. OCR is a not-for-profit organisation; any surplus made is invested back into the establishment to help towards the development of qualifications and support, which keep pace with the changing needs of today's society.

This mark scheme is published as an aid to teachers and students, to indicate the requirements of the examination. It shows the basis on which marks were awarded by examiners. It does not indicate the details of the discussions which took place at an examiners' meeting before marking commenced.

All examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

Mark schemes should be read in conjunction with the published question papers and the report on the examination.

OCR will not enter into any discussion or correspondence in connection with this mark scheme.

© OCR 2014

Annotations

Annotation	Meaning
	Blank Page – this annotation must be used on all blank pages within an answer booklet (structured or unstructured) and on each page of an additional object where there is no candidate response.
	Correct point
	Incorrect point
	Benefit of the doubt
	No benefit of doubt given
	Information omitted
	Unclear
	Level one
	Level two
	Level three
	Level four
	Not answered question
	Development
	Irrelevant, a significant amount of material that does not answer the question

Subject-specific Marking Instructions

- 1.1 Marking must be positive. Marks must not be deducted for inaccurate or irrelevant answers. Half-marks must not be used.
- 1.2 The full range of marks should be used. Do not be afraid to award full marks or no marks. Failure to do this will seriously affect the distribution of marks.
- 1.3 Be consistent from script to script and from batch to batch.
- 1.4 It is not possible to cover every possible type of response within a levels of response mark scheme and examiners are expected to use their professional judgement at all times in ensuring that responses are placed in the correct levels and given an appropriate mark within that level.
- 1.5 If a candidate reaches a particular level s/he must be rewarded with a mark within that level. It is not necessary to work through the levels.
- 1.6 Where a band of marks is indicated for a level these marks should be used with reference to the development of the answer within that level. Decide the appropriate level first and then mark within that level.
- 1.7 The mark scheme primarily aims to reward the demonstration of the skills. **Where examples are given these are not prescriptive but intended as a guide.** If in doubt refer to your team leader.

Crossed out and duplicated answers**Crossed Out Responses**

Where a candidate has crossed out a response and provided a clear alternative then the crossed out response is not marked. Where no alternative response has been provided, examiners may give candidates the benefit of the doubt and mark the crossed out response where legible.

Short Answer Questions (requiring only a list by way of a response, usually worth only **one mark per response**)

Where candidates are required to provide a set number of short answer responses then only the set number of responses should be marked. The response space should be marked from left to right on each line and then line by line until the required number of responses have been considered. The remaining responses should not then be marked. Examiners will have to apply judgement as to whether a 'second response' on a line is a development of the 'first response', rather than a separate, discrete response. *(The underlying assumption is that the candidate is attempting to hedge their bets and therefore getting undue benefit rather than engaging with the question and giving the most relevant/correct responses.)*

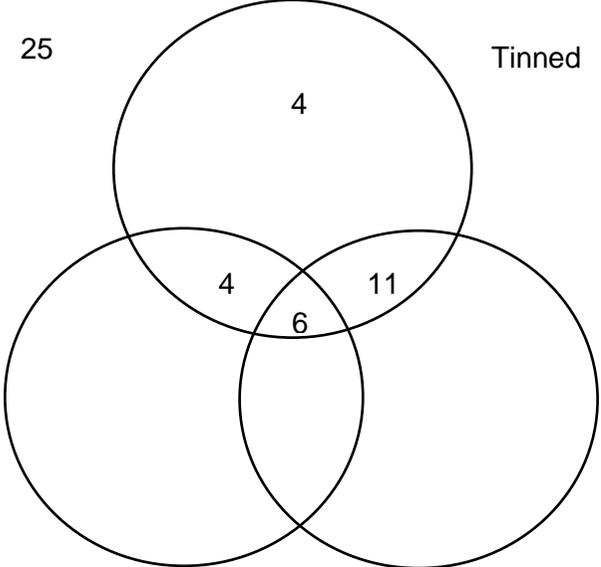
Short Answer Questions (requiring a more developed response, worth **two or more marks**)

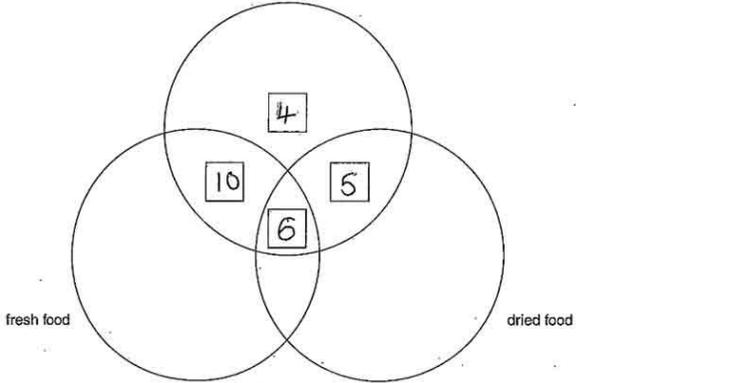
If the candidates are required to provide a description of, say, three items or factors and four items or factors are provided, then mark on a similar basis – that is downwards (as it is unlikely in this situation that a candidate will provide more than one response in each section of the response space.)

Question		Answer	Marks	Guidance
1	(a)	(i)	1	The mark is not to be awarded to any candidate who underlines the conclusion but also underlines other words or phrases from the preceding sentences.
		(ii)	1	
	(b)	(i)	1	Candidates who point to the right map or circle the title Map C rather than the whole map should still gain the mark.
		(ii)	2	NB Candidates can be credited 1 mark for (ii) if they correctly explain how the map they chose in (i) matches the argument. e.g. if Map A was circled and the candidate explains that the reasons are independent, credit 1 mark. or if Map B was circled and the candidate explains that there is an intermediate conclusion, credit 1 mark.
2	(a)	Credit 1 mark for ticking the 3 rd box: Live safely without harm	1	See marking guidance point 9 for crossed out and duplicated answers.
	(b)	(i)	2	
		Credit 1 mark for stating a flaw or any other weakness and 1 mark for an accurate explanation. Examples of creditworthy flaws/weaknesses: <ul style="list-style-type: none"> • Slippery slope • False/irrelevant appeal • Appeal to authority/expertise • Appeal to emotion • Loaded language • Emotive language/Biased language Examples of explanations of slippery slope: <ul style="list-style-type: none"> • The argument goes too fast too quickly. 		

Question	Answer	Marks	Guidance
	<ul style="list-style-type: none"> • The jump in the argument is too big • It goes from fishing to torturing humans too fast/without proper reasons. <p>Examples of False Appeal/Irrelevant Appeal/Appeal to authority/Lack of expertise:</p> <ul style="list-style-type: none"> • A professor of French is not an expert in ethics/fishing. <p>Examples of explanations of Loaded Language/Emotive Language:</p> <ul style="list-style-type: none"> • It uses powerful words like 'torture' for effect. 		
	<p>(ii) Credit 1 mark for stating a flaw or any other weakness and 1 mark for an accurate explanation.</p> <p>Examples of creditworthy flaws/weaknesses:</p> <ul style="list-style-type: none"> • Slippery slope • False/irrelevant appeal • Appeal to authority/expertise • Appeal to emotion • Loaded language • Emotive language/Biased language <p>Examples of explanations of slippery slope:</p> <ul style="list-style-type: none"> • The argument goes too fast too quickly. • The jump in the argument is too big • It goes from fishing to torturing humans too fast/without proper reasons. <p>Examples of False Appeal/Irrelevant Appeal/Appeal to authority/Lack of expertise:</p> <ul style="list-style-type: none"> • A professor of French is not an expert in ethics/fishing. 	2	The question asks candidates to identify (1 mark) and explain (1 mark). If a candidate quotes a section of the text that contains a weakness and then goes on to explain why the reasoning is weak, they should be able to access two marks for both identifying and explaining.

Question		Answer	Marks	Guidance
		<p>Examples of explanations of Loaded Language/Emotive Language:</p> <ul style="list-style-type: none"> It uses powerful words like 'torture' for effect. 		
3	(a)	<p>Credit 1 mark each for any three correct patterns associating personal details in the data. Patterns which do not link the details from more than one column do not get the mark, e.g., no mark for pointing out 5 females and 5 males.</p> <p>Examples:</p> <ul style="list-style-type: none"> All females 17-25 passed first time. All those taking lessons weekly passed second time. All 17-25 year olds took lessons twice a week. All those who passed first time took two lessons a week. None of the 26-45s passed first time. No males/only females passed first time. 	3	<p>A creditworthy answer must be a pattern in the data, rather than a conclusion that could be drawn from it. For example "females pass their test quicker than males" is not creditworthy because it is not a pattern in the data. It does not link data in more than one column.</p> <p>"Only females pass first time" and "No males passed first time" is a repeated answer and should only be credited once.</p>
	(b)	<p>Credit 1 mark for each different reason which correctly refers to a relevant pattern in the table.</p> <p>Examples:</p> <ul style="list-style-type: none"> Because of his age - none of the 26-45s passed first time. Because he is male and only females passed first time. 	2	

Question	Answer	Marks	Guidance																																				
4 (a)	<p>Credit 1 mark for each correct identification up to 4 marks for 4 correct answers.</p> <table border="1" data-bbox="465 280 1137 496"> <thead> <tr> <th></th> <th>Winner</th> <th>Second</th> <th>Third</th> <th>Fourth</th> <th>Fifth</th> </tr> </thead> <tbody> <tr> <td>Boris</td> <td>√</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> </tr> <tr> <td>Jordan</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>√</td> </tr> <tr> <td>Ken</td> <td>X</td> <td>√</td> <td>X</td> <td>X</td> <td>X</td> </tr> <tr> <td>Rob</td> <td>X</td> <td>X</td> <td>√</td> <td>X</td> <td>X</td> </tr> <tr> <td>Samuel</td> <td>X</td> <td>X</td> <td>X</td> <td>√</td> <td>X</td> </tr> </tbody> </table>		Winner	Second	Third	Fourth	Fifth	Boris	√	X	X	X	X	Jordan	X	X	X	X	√	Ken	X	√	X	X	X	Rob	X	X	√	X	X	Samuel	X	X	X	√	X		
	Winner	Second	Third	Fourth	Fifth																																		
Boris	√	X	X	X	X																																		
Jordan	X	X	X	X	√																																		
Ken	X	√	X	X	X																																		
Rob	X	X	√	X	X																																		
Samuel	X	X	X	√	X																																		
	(i) The winner was Boris	1																																					
	(ii) The person who came second was Ken	1																																					
	(iii) The person who came third was Rob	1																																					
	(iv) The person who came fourth was Samuel	1																																					
	(v) The person who came fifth was Jordan	1																																					
	(b) Credit 1 mark for ticking the 3 rd box: Finishing first and not getting disqualified	1																																					
5 (a)	<p>Either: 25</p>  <p>Or: credit 3 marks for this answer:</p>	3	<ul style="list-style-type: none"> • Credit 1 mark for correctly transferring 4, 6 and 11 into the correct boxes. • Credit 2 marks for correctly calculating that 4 customers fed their dogs a mixture of tinned and fresh food and for placing this in the correct segment of the chart. 																																				

Question	Answer	Marks	Guidance
			
(b) (i)	<p>Credit up to 2 marks for an explanation of a strength in the vet's credibility.</p> <p>2 mark examples:</p> <ul style="list-style-type: none"> • The vet has relevant experience (expertise) as she has trained and worked with dogs who have eaten different foods. • The vet would know what she is talking about (ability to see) because she can see for herself the effects of different diets in her patients. <p>1 mark examples:</p> <ul style="list-style-type: none"> • She has worked with dogs before. • She can see the effects of dried food. 	2	<p>No credit is to be given for simply naming a credibility criterion, but it may enhance the clarity of an explanation.</p> <p>Naming a criterion without an explanation gets no credit.</p> <p>A developed explanation without mention of a criterion may gain full credit.</p> <p>2 mark answers will be developed, perhaps making use of indicator words such as so, because...</p>
(ii)	<p>Credit up to 2 marks for an explanation of a weakness in the vet's credibility.</p> <p>2 mark examples:</p> <ul style="list-style-type: none"> • The vet has something to gain from exaggerating/lying in the ad (vested interest), because she will make money from sales of her own special recipe. <p>1 mark example:</p> <ul style="list-style-type: none"> • The vets will make money from selling their own food. 	2	<p>No credit is to be given for simply naming a credibility criterion, but it may enhance the clarity of an explanation.</p> <p>Naming a criterion without an explanation gets no credit.</p> <p>A developed explanation without mention of a criterion may gain full credit.</p> <p>2 mark answers will be developed, perhaps making use of indicator words such as so, because...</p>

Question		Answer	Marks	Guidance
				Confusion between bias and vested interest need not be penalised because the marks are being awarded for the quality of the explanation rather than for naming the criterion.
6		<p>Credit 1 mark for each of the following explanations:</p> <ul style="list-style-type: none"> • There was a time difference when they crossed states. • They stopped off overnight and arrived at 16.00 the next day. 	2	
7	(a)	<p>Credit 1 mark for any valid option that could be a solution to the problem.</p> <p>Examples may include:</p> <ul style="list-style-type: none"> • Summer school. • Private tutor • Setting/streaming/differentiation 	2	The option must be a suggestion that provides something extra for the children who would otherwise be held back. For example, "longer school days" is not a creditworthy answer because it applies to everyone and would not help to close the gap or help the lower attaining students manage their transition.
	(b)	<p>Credit 1 mark for each reasonable criterion.</p> <p>Examples may include:</p> <ul style="list-style-type: none"> • Cost • Special educational needs • What the student would like to happen • Emotional impact on the student • Student's effort/behaviour/attitude to learning • Teacher skills • Available time • Available expertise • Available technology • Effectiveness 	2	Use of credibility criteria will usually be evidence of the candidate misinterpreting this question, but answers should be checked carefully for creditable material.

Question		Answer	Marks	Guidance										
8	(a)	<p>Credit 1 mark for each valid weakness identified.</p> <p>Examples:</p> <ul style="list-style-type: none"> • Sample size too small. • One class/one school is not representative. • Bias because of recent classmate being kept back. • The survey was conducted in the USA. <p>The questions gave restricted options.</p>	3											
	(b)	<p>Credit 1 mark for each correct answer as follows:</p> <table border="1"> <tbody> <tr> <td></td> <td>Conclusion can be drawn</td> </tr> <tr> <td>97% of these students were not worried about whether they had a date for the prom</td> <td>No</td> </tr> <tr> <td>Fewer students chose being bullied than chose losing a parent as their top fear</td> <td>Yes</td> </tr> <tr> <td>No students were concerned about global warming</td> <td>No</td> </tr> <tr> <td>Only 17% of students were frightened of serious illness</td> <td>No</td> </tr> </tbody> </table>		Conclusion can be drawn	97% of these students were not worried about whether they had a date for the prom	No	Fewer students chose being bullied than chose losing a parent as their top fear	Yes	No students were concerned about global warming	No	Only 17% of students were frightened of serious illness	No	4	
	Conclusion can be drawn													
97% of these students were not worried about whether they had a date for the prom	No													
Fewer students chose being bullied than chose losing a parent as their top fear	Yes													
No students were concerned about global warming	No													
Only 17% of students were frightened of serious illness	No													
	(c)	<p>Credit 1 mark for an answer which shows an understanding of the following:</p> <p>Examples may include:</p> <ul style="list-style-type: none"> • Sample size was too small • Sample was unrepresentative • Limited options were available 	1											

Question	Answer	Marks	Guidance
	<ul style="list-style-type: none"> Results may have been affected by the recent event of a classmate being held back. 		
9	<p>Performance descriptions for 7 to 9 marks: Level 3</p> <ul style="list-style-type: none"> The conclusion is precisely and clearly stated Reasons are persuasive, cogent and fully developed Counter arguments are valid The structure of the reasoning is clear and explicit and places minimal reliance on assumptions Evidence derived from the documents is used critically and strengthens the argument Grammar, spelling and punctuation are good Any ideas borrowed from the documents are developed and expanded <p>Performance descriptions for 4 to 6 marks: Level 2</p> <ul style="list-style-type: none"> The conclusion is clearly stated Reasons which are plausible and relevant are offered The structure of the reasoning is not fully explicit and does rely on some assumptions Evidence derived from the documents is used to strengthen the argument Grammar, spelling and punctuation are adequate Any ideas borrowed from the documents are re-expressed in the students own words and used appropriately but not necessarily further developed <p>Performance descriptions for 1 to 3 marks: Level 1</p> <ul style="list-style-type: none"> The conclusion is imprecise and unclear Reasons offered are undeveloped and only provide weak support for their conclusion Structure is either absent or minimal or unclear Ideas are copied from documents without further development Evidence derived from the document is not always 	9	<p>The most important factor determining the level is the quality of the reasoning. An answer with two relevant and cogent developed reasons should always access Level 3. A reason is likely to be developed if there is a use of indicator words. A developed reason may also be supported with evidence, examples or explanation. An undeveloped reason is likely to invite the response, “and so...” or “why?”</p> <p>Candidates may attack claims made by the Headteacher. For example:</p> <ul style="list-style-type: none"> The education systems in the four countries mentioned are not necessarily better because of their use of grade retention. Just because other countries use grade retention, it does not follow that we should. There are other options for dealing with students who have not reached the expected standard. Teachers will not necessarily have to teach students of wildly differing abilities in the same class. <p>Candidates may refer to the findings of the academic researcher in Document D, who questions the effectiveness of grade retention.</p> <p>Candidates may use reasons relating to the social and emotional impact of grade retention.</p> <p>Although candidates may use some of the ideas in the documents to develop their own reasoning, answers that are heavily derivative are unlikely to access the higher mark bands.</p>

Question	Answer	Marks	Guidance
	<p>relevant or significant</p> <ul style="list-style-type: none"> Grammar, spelling and punctuation may be inadequate <p>Performance descriptions for 0 marks</p> <ul style="list-style-type: none"> No conclusion Claims are irrelevant and imprecise 		<p>Top level answers which argue the opposite way to what the question asks for (reasons that support the claim) can be awarded a maximum of 4 marks (bottom L2)</p>
10	<p>Performance descriptions for 7 to 9 marks: Level 3</p> <ul style="list-style-type: none"> The conclusion is precisely and clearly stated Reasons are persuasive, cogent and fully developed Counter arguments are valid The structure of the reasoning is clear and explicit and places minimal reliance on assumptions Evidence derived from the documents is used critically and strengthens the argument Grammar, spelling and punctuation are good Any ideas borrowed from the documents are developed and expanded <p>Performance descriptions for 4 to 6 marks: Level 2</p> <ul style="list-style-type: none"> The conclusion is clearly stated Reasons which are plausible and relevant are offered The structure of the reasoning is not fully explicit and does rely on some assumptions Evidence derived from the documents is used to strengthen the argument Grammar, spelling and punctuation are adequate Any ideas borrowed from the documents are re-expressed in the students own words and used appropriately but not necessarily further developed <p>Performance descriptions for 1 to 3 marks: Level 1</p> <ul style="list-style-type: none"> The conclusion is imprecise and unclear Reasons offered are undeveloped and only provide weak support for their conclusion 	9	<p>The most important factor determining the level is the quality of the reasoning. An answer with two relevant and cogent developed reasons should always access Level 3. A reason is likely to be developed if there is a use of indicator words. A developed reason may also be supported with evidence, examples or explanation. An undeveloped reason is likely to invite the response, “and so...” or “why?”</p> <p>Relevant reasons may include:</p> <ul style="list-style-type: none"> Although good teaching helps children succeed, effort on the part of the child is also required. It is not a teacher’s fault if a child has learning difficulties. It is not a teacher’s fault if a child has other problems such as illness. Parents are also influential and they may be unsupportive of education. A child may not have been taught well by previous teachers and so this is not the fault of the current teacher. It is not the fault of the teacher if class sizes are too big or if the class is disruptive. <p>Top level answers which argue the opposite way to what the question asks for (reasons that support the claim) can be awarded a maximum of 4 marks (bottom L2)</p>

Question	Answer	Marks	Guidance
	<ul style="list-style-type: none"> • Structure is either absent or minimal or unclear • Ideas are copied from documents without further development • Evidence derived from the document is not always relevant or significant • Grammar, spelling and punctuation may be inadequate <p>Performance descriptions for 0 marks</p> <ul style="list-style-type: none"> • No conclusion • Claims are irrelevant and imprecise 		

OCR (Oxford Cambridge and RSA Examinations)
1 Hills Road
Cambridge
CB1 2EU

OCR Customer Contact Centre

Education and Learning

Telephone: 01223 553998

Facsimile: 01223 552627

Email: general.qualifications@ocr.org.uk

www.ocr.org.uk

For staff training purposes and as part of our quality assurance programme your call may be recorded or monitored

Oxford Cambridge and RSA Examinations
is a Company Limited by Guarantee
Registered in England
Registered Office; 1 Hills Road, Cambridge, CB1 2EU
Registered Company Number: 3484466
OCR is an exempt Charity

OCR (Oxford Cambridge and RSA Examinations)
Head office
Telephone: 01223 552552
Facsimile: 01223 552553

© OCR 2014

