



Cambridge International AS & A Level

THINKING SKILLS

9694/21

Paper 2 Critical Thinking

May/June 2022

MARK SCHEME

Maximum Mark: 50

Published

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

Mark schemes should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

Cambridge International will not enter into discussions about these mark schemes.

Cambridge International is publishing the mark schemes for the May/June 2022 series for most Cambridge IGCSE, Cambridge International A and AS Level and Cambridge Pre-U components, and some Cambridge O Level components.

This document consists of **7** printed pages.

Generic Marking Principles

These general marking principles must be applied by all examiners when marking candidate answers. They should be applied alongside the specific content of the mark scheme or generic level descriptors for a question. Each question paper and mark scheme will also comply with these marking principles.

GENERIC MARKING PRINCIPLE 1:

Marks must be awarded in line with:

- the specific content of the mark scheme or the generic level descriptors for the question
- the specific skills defined in the mark scheme or in the generic level descriptors for the question
- the standard of response required by a candidate as exemplified by the standardisation scripts.

GENERIC MARKING PRINCIPLE 2:

Marks awarded are always **whole marks** (not half marks, or other fractions).

GENERIC MARKING PRINCIPLE 3:

Marks must be awarded **positively**:

- marks are awarded for correct/valid answers, as defined in the mark scheme. However, credit is given for valid answers which go beyond the scope of the syllabus and mark scheme, referring to your Team Leader as appropriate
- marks are awarded when candidates clearly demonstrate what they know and can do
- marks are not deducted for errors
- marks are not deducted for omissions
- answers should only be judged on the quality of spelling, punctuation and grammar when these features are specifically assessed by the question as indicated by the mark scheme. The meaning, however, should be unambiguous.

GENERIC MARKING PRINCIPLE 4:

Rules must be applied consistently, e.g. in situations where candidates have not followed instructions or in the application of generic level descriptors.















GENERIC MARKING PRINCIPLE 5:

Marks should be awarded using the full range of marks defined in the mark scheme for the question (however; the use of the full mark range may be limited according to the quality of the candidate responses seen).

GENERIC MARKING PRINCIPLE 6:

Marks awarded are based solely on the requirements as defined in the mark scheme. Marks should not be awarded with grade thresholds or grade descriptors in mind.

ANNOTATIONS

	In Qs 1, 3 and 4 use to indicate where marks have been awarded.
	Use to indicate an answer or element that is wrong.
	Not good enough.
	Benefit of doubt.
	In Q5 use to indicate creditworthy other argument element. In Q3 use to indicate 'significant additional element'.
	In Qs 2 and 5 use to indicate 'conclusion'.
	In Qs 2 and 5 and in short questions where indicated, use to indicate that marks have been capped because an essential element of the answer is absent.
	In Q2 use to indicate creditworthy evaluation of a source.
	In Q5 use to indicate creditworthy intermediate conclusion.
	In Q2 use to indicate creditworthy personal thinking. In Q3 use to indicate paraphrase.
	In Q2 use to indicate creditworthy inferential reasoning. In Q5 use to indicate creditworthy reason used to support a conclusion.
	In Q2 use to indicate creditworthy use of a source. In Q5 use to indicate distinct strand of reasoning.
	In appropriate cases, use to indicate significant omission. In Q3 use to indicate 'significant omission'.
	Use in answers when no other annotations have been used. Use on blank pages.
Highlight	Use to draw attention to part of an answer.

There must be at least one annotation on each page of the answer booklet.

Question	Answer	Marks
1(a)	The photographs illustrate the two types of smile identified in Source A / show that Duchenne smiles involve both mouth and eyes, whereas non-Duchenne smiles involve only the mouth [1], but there is no way of knowing whether one of the smiles is genuine and the other fake / if both photos are posed, then they can both be described as 'fake' [1]. The photographs do not confirm the use of two different muscles in the two types of smile [1]. The difference between the two pictures could be explained as a matter of degree rather than constituting two different types of smile [1]. The two pictures would not necessarily exclude there being more than two types of smile [1].	2
1(b)(i)	The first two sentences imply that the author has some expertise in psychology [1], but publication in a general-interest magazine does not necessarily require great expertise [1] and the author's reasoning is based on everyday experience rather than academic expertise [1]. <i>No judgement mark.</i>	2
1(b)(ii)	<p><i>1 mark each for up to 2 of the following:</i></p> <ul style="list-style-type: none"> • As researchers based in a university, they have at least a fairly good reputation. • Since they studied the baseball cards personally, they had excellent ability to see. • The researchers have a vested interest to be accurate in their research in order to protect their reputation / satisfy peer review. • (The subject matter of their research is very unlikely to have been funded by a commercial agency and so) they do not have vested interest to distort their findings to support commercial interests. • As professional researchers, they are expected to be neutral. 	2
1(c)	<p><i>For each of up to two weaknesses: 2 marks for a clear, accurate identification of a weakness. 1 mark for a vague or incomplete identification of a weakness</i></p> <p><i>Indicative 2-mark answers:</i></p> <ul style="list-style-type: none"> • Since all the photographs were presumably posed, it does not make sense to describe some as genuine and the others as fake. • A single photograph is not a reliable indicator of the way in which people generally smile in real life. • Even if the players were happy at the time the photographs were taken, it does not necessarily mean they were happy for the whole of their lives. • The claim that 'Duchenne smiles are an indicator of happiness' is an essential step in the argument but is unsupported. • The researchers have made a generalised claim on the basis of a sample which is limited by gender, geography and occupation. • Age at time of photograph could plausibly be a confounding variable. • We don't know the sizes of the three sub-groups, so cannot meaningfully interpret and compare the averages. 	4

Question	Answer	Marks
1(d)	<p><i>2 marks for a correct answer with accurate explanation</i> <i>1 mark for a correct answer with vague, incomplete or generic explanation</i> <i>0 marks for a correct answer without explanation</i> <i>0 marks for an incorrect answer with or without explanation</i></p> <p><i>2-mark answer (3 ticks)</i> Source E is an argument✓. The conclusion is the first sentence✓ (<i>accept</i> The conclusion is the bullet-point). The last three sentences of the source (from ‘This body language....’) provide reasons to support✓ the conclusion.</p> <p><i>1-mark answers (2 ticks)</i> Source E is an argument✓, because it includes a persuasive conclusion supported by reasons✓. Source E is an argument✓. The conclusion is the first sentence✓ (<i>accept</i> The conclusion is the bullet-point). Source E is an argument✓. It begins by encouraging people to practise smiling and supports✓ this by giving reasons for this advice.</p>	2
1(e)	<p><i>2 marks for an exact version of either of the following</i> <i>1 mark for an incomplete or vague version of either of the following</i></p> <p><i>Either</i> Source A claims that Duchenne smiles are ‘genuine’, whereas Source E suggests they can be learned/practised, which would not be genuine. <i>Or</i> Source A suggests that Duchenne smiles involve two separate muscles, whereas Source E suggests that extending the corners of one’s mouth will automatically influence the eye sockets.</p>	2

Question	Answer		Marks
2	Conclusion	1 mark for an explicit supported conclusion <i>Cap at 7 if conclusion is absent or implicit</i>	8
	Use of sources	2 marks for use of 4 or 5 sources 1 mark for use of 1–3 sources	
	Evaluation of sources	1 mark for each valid evaluation of the credibility or quality of reasoning in sources <i>Maximum 3 marks</i>	
	Inferential reasoning from sources	1 mark each <i>Maximum 3 marks</i>	
	Personal thinking	1 mark each <i>Maximum 2 marks</i>	
<p>Annotate answers as follows:</p> <p>CON To indicate ‘conclusion’.</p> <p>S To indicate creditworthy use of source.</p> <p>EVAL To indicate creditworthy evaluation of source.</p> <p>R To indicate creditworthy inferential reasoning.</p> <p>P To indicate creditworthy personal thinking.</p> <p>C To indicate that mark has been capped.</p> <p>Indicative content</p> <ul style="list-style-type: none"> Source A supports the claim, by describing the two kinds of smile and identifying them as genuine and fake. This source is old but is described as ‘influential’. Source B illustrates the difference between Duchenne and non-Duchenne smiles Source C challenges the identification of a different dichotomy as ‘genuine’ and ‘fake’, but is admittedly not based on professional expertise. Source D seems to assume that individuals consistently smile in either Duchenne or non-Duchenne ways and that this difference is linked to happiness, which if true might indicate a benefit of learning how to perform Duchenne smiles. Source E identifies psychological and social benefits of Duchenne smiles, but the advice to practise smiling in this way implies that such smiles are not necessarily ‘genuine’. 			

Question	Answer	Marks
2	<p>Example 8-mark answer (196 words)</p> <p>Most people are confident that they can intuitively tell the difference between genuine and fake smiles. Many would identify the first smile in Source B as genuine and the second as fake. Because most people have not read academic studies on the subject (such as Source A), it is most likely that this awareness is acquired unconsciously during infancy.</p> <p>Although Source A suggests a physiological basis for the difference, the author's expertise was limited, because most discoveries in physiology have occurred since his death. Furthermore, Source C suggests that the division between genuine and fake is simplistic and unhelpful; however, this article is admittedly not based on professional expertise. Furthermore, if Source E is true, it is possible to practise "genuine" smiles, which suggests that they are not spontaneous and therefore not genuine. Similarly, since the photographs studied in the research described in Source D were presumably all posed, they can all be described as "fake", which seriously weakens the conclusions drawn by the researchers.</p> <p>It therefore seems likely that there is a significant difference between genuine and fake smiles, but telling the difference may not be as easy or as reliable as most people imagine.</p>	

Question	Answer	Marks
3,4,5	<i>The Questions have been removed.</i>	