

Commentary on candidate 1 evidence

Experimental Determination of the Surface Tension of Water

The evidence for this candidate has achieved the following marks for each section of this course assessment component.

Section	Mark available		Mark awarded	Comments
1 Abstract	1		1	The candidate has clearly stated the aim of the project and given the findings for each procedure used.
2 Underlying physics	4		3	<p>The candidate has included the underlying physics at the start of each procedure. The style is reminiscent of a textbook, but there is no citing.</p> <p>Relationships are justified and symbols defined.</p> <p>The description of the physics in the second procedure doesn't justify or explain the need for the Rayleigh correction factor. In all three descriptions of the underlying physics sections, explanatory diagrams would have been helpful.</p> <p>Overall, the candidate provided a fairly complete account of the physics used.</p>
3 Procedures	a	2	2	<p>The candidate has included reasonable, labelled diagrams, adequate for replication, for each procedure.</p> <p>Photos, which included the travelling microscope, would have been a slight improvement.</p>
	b	2	1	The descriptions of procedures were written in appropriate tense and voice. In the description of the first procedure there is a discrepancy about the level of water in the beaker between the diagram and description. In addition, the number of repeats has not been specified.

Section	Mark available		Mark awarded	Comments
	c	3	3	The candidate has completed procedures which are all at the appropriate level and original to the candidate. With a reasonable range of independent variables and number of repeats, the procedures would have taken 10-15 hours lab time.
5 Discussion (conclusion(s) and evaluation)	a	1	1	The candidate has stated a conclusion, relevant to the aim, for each procedure.
6 Presentation	b	1	0	The candidate has referenced three sources, but has cited only two. These two sources are cited appropriately, but their references are not in an appropriate style. The third source is referenced appropriately, but has not been cited.
Total	14		11	

Commentary on candidate 2 evidence

Determination of acceleration due to gravity

The evidence for this candidate has achieved the following marks for each section of this course assessment component.

Section	Mark available		Mark awarded	Comments
1 Abstract	1		1	The candidate has clearly stated the aim and findings of the project.
2 Underlying physics	4		1	The candidate has included a short underlying physics paragraph, which contains some background. For the first two procedures, the candidate has stated the relationships used, with justification and most symbols defined. The physics behind the first procedure, however, is not all at Advanced Higher level, and the physics behind the third procedure is missing.
3 Procedures	a	2	1	The candidate has included diagrams of the apparatus used, with some labelling. Some logistical detail, like the method of suspension of the spring and pendulum, is lacking.
	b	2	1	The descriptions of procedures were written in appropriate tense and voice. The description of two of the procedures did not include the range and interval of independent variables, and so do not fully support straightforward replication.
	c	3	2	The candidate has completed three procedures, two of which are similar, with straightforward set ups.
5 Discussion (conclusion(s) and evaluation)	a	1	1	The candidate has stated a conclusion for each procedure.

Section	Mark available		Mark awarded	Comments
6 Presentation	b	1	1	The candidate has cited and referenced three sources in acceptable Harvard style.
Total	14		8	