

Commentary on candidate 3 evidence

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 Aim	1	1	The aim clearly describes the purpose of the investigation.	
2 Underlying biology	3	0	There are no expanded descriptions/explanations, which are relevant to the aim and at a depth appropriate to National 5 Biology.	
3 Data collection and handling	6	a	0	The brief description of the experiment is not suitable, as the method has not been summarised. Too much detail has been provided.
		b	1	The raw data is sufficient. An appropriate number of values (5 temperatures), over a suitable range, is used for this experiment. Repeated measurements have also been made. The 'Average' column of the table is considered in section 3d.
		c	1	The experimental data is presented in a table. All columns have clear headings with units.
		d	0	The mean values (averages) from the candidate's experimental data are not all calculated correctly. The value for 43°C is incorrect.

Section	Mark available	Mark awarded		Comments
		e	1	A table of data from their research is included. This is relevant to the aim and supports the experimental data.
		f	1	The source of the research data is referenced as per the instructions for candidates. This is given in sufficient detail for it to be retrieved by a third party.
4 Graphical presentation	4	a	1	The graph produced is based on the candidate's experimental data. A line graph is selected which is the appropriate format for this data.
		b	1	Both axes have suitable scales.
		c	0	The y-axis label is incorrect.
		d	1	The points are plotted correctly, and joined with an appropriate line. Although an error was made in calculating one of the averages, the points plotted are accurate for the figures calculated.
5 Analysis	1	0		The analysis only compares the optimum temperatures of the experimental and research data rather than the trends/patterns shown.
6 Conclusion	1	0		The conclusion given is invalid as it refers only to the optimum temperature and does not take into account the other temperatures and their effect. There is also no mention of yeast.

Section	Mark available	Mark awarded	Comments
7 Evaluation	2	1	The size of the pieces of dough is correctly identified as a factor that could have had a significant effect on the reliability, accuracy or precision of the experiment.
		1	An explanation as to why weighing each piece of dough at the start would minimise that factor is given.
8 Structure	2	a 1	An informative title is given.
		b 1	The report is clear and concise.
Total	20	12	