

Candidate 4 – Rocky shore transect

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 fieldwork.	
2. Underlying environmental science	3	3	A good understanding of relevant environmental science is demonstrated, at a depth appropriate to National 5.	
3. Data collection and handling	6	a	1	The overall experimental procedure can be visualised from the description provided.
		b	1	The raw data is sufficient. Four sampling points are assessed, with three quadrats assessed at each and averages calculated.
		c	1	The experimental data is presented in a series of four similar tables, each with correct column headings and units.
		d	1	The average values are correctly calculated. These are included in the table of results, which is acceptable. The mean values have also been rounded to make it easier to plot on a graph, which is good practice.
		e	1	The secondary data/information is drawn from a diagram referring to shore zonation and is relevant to the aim.
		f	1	The URL for the secondary source of information (the shore zonation diagram) is provided in sufficient detail to be retrieved by a third party.

4. Graphical presentation	4	a	1	The bar graph displays data derived from the candidate's fieldwork data. The bar graph format is appropriate for this type of data.
		b	1	The axes of the graph have suitable scales. Bar labels have been included on the x-axis. The y-axis scale is linear and suitable for the range of the data values.
		c	1	The axes of the graph have suitable labels and units.
		d	1	A graphing package has been used, and the bar graph includes both major and minor gridlines. The y-axis scale used makes it easy to check the plotted values. If drawn by hand, the rounding of the average values would make it straightforward to plot and check.
5. Analysis	1	1	1	The experimental data have been compared with information on the diagram acquired from the internet source, and a relationship has been identified.
6. Conclusion	1	1	1	The conclusion is valid and largely relates to the aim. It is stated in the conclusion that species present were counted, which is not strictly true: it is the presence of a species in a quadrat square that is counted, rather than individuals, ie there could be more than one individual present in a quadrat square. However, the conclusion includes reference to species assessed using the transect and links back to the aim, and so the mark is awarded.
7. Evaluation	2	2	2	Evaluation of the fieldwork procedure includes the need to correctly identify species, and improving validity through use of the same methodology each time, but also that having different people involved in the assessment could introduce error.
8. Structure	2	a	1	The title provided is appropriate.
		b	1	The report is clear and concise and flows in a logical manner.
Total	20	20	20	