

Rubric for assessing a writing sample

Question: How would you design a thorough study of the intertidal?

Concept/skill	Goal Achievement		
	High	Middle	Low
<p><u>Awareness</u></p> <ul style="list-style-type: none"> √Safety in lab and field √Dangerous animals √Handling live animals √Regulations and permits 	<p>Safety protocols well described, including for handling animals. Careful consideration of health and comfort of animals. Effort to find and follow gov regulations.</p>	<p>Safety protocols well described, but lacking for handling animals. Minimal discussion of health and comfort of animals. Mention of gov regulations as a possibility to be considered.</p>	<p>Minimal safety protocols described. Little discussion of handling animals. Unaware of gov regulations.</p>
<p><u>Science Methods</u></p> <ul style="list-style-type: none"> √Hypothesis formation and testing √Organizing data √Error and controls/standardization √Sample size/replication √Communicating findings 	<p>Formulate a justified, testable hypothesis about intertidal community. Method for organization of data well described. Possible sources of error identified and controls well established, including replication of samples. Plan to communicate findings with others.</p>	<p>Some ideas about intertidal community, but no clear, testable hypothesis. Method for organizing data mentioned, but not well described. Multiple controls described and some sources of error identified. Some plan in place for a final report without explicitly stating that communication of data is important.</p>	<p>No plan to test hypotheses about intertidal community. No method for organizing data. Minimal controls described with no identification of corresponding sources of error. No indication of replication of samples</p>
<p><u>Sampling</u></p> <ul style="list-style-type: none"> √Qualitative and quantitative data √Species richness and diversity √Species Abundance √Identifying species √Tracking long term changes 	<p>Plan to include both qual and quant data. Describe spp richness, diversity, and abundance. Plan to ID species. Long term plan to track changes seasonally or yearly.</p>	<p>Describe taking qual or quant data, but not both. Little distinction between spp richness, diversity, and abundance. Vague plan to ID species. Minimal long term plans.</p>	<p>No distinction made between qual and quant data or between spp richness, diversity, and abundance. No plan to ID species. No plan for long term.</p>