Sample Final Project: Display Boards

***This class went to an intertidal site three times, once to check out the site and start to learn identifications, and the second and third time to sample the site using transects and quadrats. After the second trip the students graphed their preliminary results and made a hypothesis to test on the third trip.*

For our final project with the OPIHI sampling we have been conducting this spring, we will be creating individual display boards. The display boards will be very similar to a science fair display board. They will be your opportunity to demonstrate your knowledge of the scientific method and communicate your results to others!

Required Components:

1. Title – The title should be descriptive of what you found out with regards to your individual hypothesis.

Example: "Intertidal Sea Cucumbers Are Most Common in the Low Intertidal"

2. Hypothesis – This is the specific prediction that you made from the data you graphed after your second field trip and tested on our last trip.

Example – "I predict that sea cucumbers will be most common in the high intertidal."

3. Introduction – This will be a one paragraph section that establishes why we study the intertidal habitat. This section also includes any relevant background information on intertidal habitats. In addition, this is where you write the question you were most interested in that led to your specific hypothesis.

4. Materials and Methods – In this section you will list in great detail exactly what you did with the OPIHI project.

Example –

"1. We conducted intertidal surveys at Maili Point on three negative tides this spring.

2. We ran 20M transect lines and used a quadrat to survey the algae and invertebrates at 25 points within the quadrat.

3. We placed the quadrat every 4 meters along the transect line starting at 0 meters.

4. We recorded data on waterproof paper using a clipboard and pencil.

5. We double-checked that we had counted all 25 points within the quadrat before moving on to the next quadrat.

6. We graphed our data in Excel by making bar graphs…"

5. Results – In this section you simply write what you found out. You do not need to write what you think the data means.

Example – “Please see in the bar graph that I found 4 sea cucumbers in the 0 meter quadrat, 2 sea cucumbers at the 4 meter quadrat, and no cucumbers in any of the other quadrats.”

6. Conclusions – Here is where you write whether or not you think your data supports your hypothesis.

Example – “My data suggests that sea cucumbers are more common in the low intertidal than in the high intertidal. These data **DO NOT SUPPORT** my hypothesis that sea cucumbers would be most common in the high intertidal.”