General *Used good grammar/neat, tidy* ___ **/1** Total Score _____**/ 10**

Focus Question: Does the seismogram wave shape and size change depending on the direction, force, or distance of the pounding from the seismograph (laptop)?

Topic Sentence: In this experiment we made earthquakes. We also took mallets and we used SeisMac on our laptops to see what would happen if we hit our table, and we tested what the waves would look like. We also tested what they would look like by how much energy and force we put into the tap.

Described what you did in the investigation ___ */1*

1. Results and Evidence *We found the height and what they ended up looking like at the end of our tests. We also found that when we hit the table hard the waves turned out bigger, and when we hit the table softer the waves turned out smaller. We tested the waves on our laptops on Seizemac.*

Compare near to far, or hard to soft, or horiz. to vert.

We found out that . . .

We found that when we hit the table hard the waves turned out bigger. Also, when we hit the table softer the waves turned out smaller.

My data shows that . . .

Our average height of our waves were 2cm, 1.525cm, 3.375cm, and 3.7cm tall.

We found out that . . .

Our waves were the response for our taps and they showed up on SeizeMac. Also all the movement and vibration showed and every little thing was responded.

My data shows that . . .

We tapped the table and the movement of our taps showed and responded on SeizeMac. Our waves were mostly the same height and we had the same energy in our taps.

2. Explanation using science vocabulary

This experiment was related to earthquakes because we tested the movement and the vibration of the table and the waves on SiezeMac. Our waves ended up like this because we used different forces and energies and the computer took the vibration and created waves. We tried keeping all the waves the same force and the same size, and that affected what the waves turned out looking like. *The energy affected the table and that responded on SeieseMac.*

• *state your results* • *include data(& units) from your data table* • *use 1 statistic (eg mean, median)*	**/2**	• *use science terms to explain results*	**/2**

3. Problems and Impact on Data		4. Conclusion and Improvement/New Question	
A problem we had was . . . We had trouble keeping the waves looking all the same, and we had trouble keeping the energy the same in all taps. I think this made the waves look different from each other because they all had different energy, and sizes. A solution for this would be to hit the table the same way for all waves, and keep the waves looking identical.		In conclusion, we found that . . . My conclusion is we made waves with SeisMac on our laptops, and we found the size and what the earthquake wave turned ot looking like. I had fun doing it and it was really interesting to see what the waves turned out looking like. Based on this experiment another question I would like to investigate is .. I would like to find out what would happen if we tapped the bottom of the desks (topic sentence).	
• *describe the problem* • *describe the effect of the problem on your data*	**/2**	• *re-state findings* • *suggest an improvement or new question*	**/2**

4 **Highly Proficient**	**3** **Proficient**	**2** **Nearly Proficient**	**1** **Developing**
• I can show accurate and complete understanding of this learning target. No misconceptions are held. • I can use data to thoroughly explain how changing the distance, direction, or force of the pounding changes the seismogram.	• I can explain how changing the distance, direction, or force of the pounding changes the seismogram. • I use data from tests to determine similarities and differences among the two test conditions.	• I can use data to explain how changing the distance, direction, or force of the pounding changes the seismogram with no significant misconceptions BUT with some omissions or minor errors.	• My explanation has significant omissions and/or errors in my understanding. • I need to use data in my explanation.

Score: 4
I think I deserve a four because I used our science vocab and I used full and complete sentence in my work. I used data in my explanation and I worked hard on this assignment.