

Ocean Acidification Lab Report

We will be using this experiment to learn how an acidifying ocean can affect the shells of different bivalve species. The pH of vinegar is much lower than the ocean is expected to reach, this lab is for demonstration purposes.

Question: How will jingle shell, clam and oyster shells be affected by pH?

Create a **hypothesis** for what you think will happen to the shells after three days in their respective solution.

Experimental Setup: You will be comparing the reaction of three bivalve species common to Long Island Sound under two different pH conditions, Long Island Sound (LIS) water and vinegar. The experiment will occur over several days.

Use the tables provided below to record your data throughout the duration of the experiment.

OYSTER IN LIS WATER		OYSTER IN VINEGAR	
Pre Weight		Pre Weight	
Weight Day ____		Weight Day ____	
Post Weight		Post Weight	
Pre Description		Pre Description	
Post Description		Post Description	

Observational Notes:

CLAM IN LIS WATER		CLAM IN VINEGAR	
Pre Weight		Pre Weight	
Weight Day ____		Weight Day ____	
Post Weight		Post Weight	
Pre Description		Pre Description	
Post Description		Post Description	

Observational Notes:

JINGLE SHELL IN LIS WATER		JINGLE SHELL IN VINEGAR	
Pre Weight		Pre Weight	
Weight Day ____		Weight Day ____	
Post Weight		Post Weight	
Pre Description		Pre Description	
Post Description		Post Description	

Observational Notes:

Conclusion:

- 1. Which of the shells was most affected? Why do you think this is?**

- ## 2. What does this mean for this species' population?

- ### 3. What repercussions could ocean acidification have on the LIS food web?

- #### 4. How could ocean acidification affect the human population?

