

Don't Clam Up – Lab Activity Data Sheet

Hypothesis:

Temperature Variable Group

	Beaker 1	Beaker 2	Beaker 3
Temperature (°C)			
Mass of Clam (g)			
Rate of Respiration (mL of O ₂)			

Body Mass Variable Group

	Beaker 1	Beaker 2	Beaker 3
Temperature (°C)			
Mass of Clam (g)			
Rate of Respiration (mL of O ₂)			

Conclusion Questions:

1. How are respiration, body mass, and temperature related?
2. How will climate change in the Arctic affect the respiration of the dominant bivalves that live there?
3. What could potentially happen to individual bivalve body mass and overall bivalve biomass with an increase in ocean temperature? (Hint: think carrying capacity!)
4. How will the change in biomass from question c affect animals like walrus and Spectacled Eiders?