

# Sodium Alginate Respiration Worksheet

## Data Table: Mass

Sample	Mass of Spheres
Sucrose	
No Sucrose	

## Data Table: Change in pH

Sample		Initial	5 min	10 min	15 min	20 min	25 min	Final
Sucrose	pH							
	Color							
No Sucrose	pH							
	Color							

## Post-Lab Analysis and Calculations

1. What was the change in pH of each of the samples?
  
2. Which sample experienced a higher rate of respiration? Provide evidence to support your answer.
  
3. At what point in time did you begin to see changes in the color of each sample?
  
4. Sucrose is a disaccharide consisting of one monomer of glucose and one monomer of fructose. Respiration requires glucose. Enzymes break the disaccharide into glucose and fructose and additional enzymes help convert fructose to glucose. Predict whether the rate of respiration will be higher, lower or the same if glucose is used instead of fructose. Provide evidence to support your answer.