

**Post-Lab Questions** (*Answer the questions in the spaces provided.*)

1. Plot the CO<sub>2</sub> level and glucose concentration over time on the same graph. Use different pencil colors or different shapes to mark each data point on the graph. Include a legend to show which line belongs to which data set.
2. Was the group's prediction (*Pre-Lab Activity #1a*) supported by the results? Explain!
3. *a.* What happened to the pH of the mixture from the beginning to the end?  
  
*b.* Explain the reason for the change in pH. (What do you think was being produced to affect the pH and how does that compound affect pH?)
4. Based on the graph of the data, during which time period did the yeast appear to be growing/consuming glucose the fastest? Use specific data to support your answer.
5. Why did the lid of the fermentation tube have holes in it?
6. Was a control used in this experiment?  
*a.* If yes, what was it?  
  
*b.* If no, what would a control setup contain?  
  
*c.* Why would a control tube be necessary?
7. *a.* -Although not visible or tested for, what other compound was present inside the tube (refer to *Background Information*).  
  
*b.* What evidence from the data supports your answer! (*Hint: What happened to the color of the solution in the small beaker?*)
8. Was the process occurring inside the tube mostly aerobic or anaerobic? Explain your choice.
9. *a.* -How could this experiment be modified to increase the amount of CO<sub>2</sub> produced?  
  
*b.* If the change suggested in Question 9a was done, what do you predict would happen to the amount of the "invisible" compound present in the mixture? (Question #7)  
  
*c.* Why would this occur?
10. List three things that could be done, as far as procedures, to improve the overall results?