**Cellular Respiration and Bromothymol Blue**

**Data and Analysis Questions**

1. What was the general trend of the data?
2. Using evidence from the cellular respiration equation, propose an explanation that could account for this general trend in the data.
3. Was there any data that did not fit the general trend? If so, explain.
4. Using evidence from the cellular respiration equation, propose an explanation that could account for this discrepant data.
5. How could this data have been affected if the experiment were conducted using athletes?
6. Using evidence from the cellular respiration equation, propose an explanation for why this would happen if we tested athletes.
7. How could this data have been affected if the experiment were conducted on individuals with asthma?
8. Using evidence from the cellular respiration equation, propose an explanation for why this would happen if we tested athletes.
9. What cellular process would reverse the color change in Bromothymol Blue that was seen when carbon dioxide was present?
10. Using evidence the cellular respiration equation, describe how the cellular process above would reverse the color change. List three additional sources of error that could have changed the outcome of this experiment. For each source of error, explain how it would affect the data.
11. List three ways to improve the validity of this experiment. For each improvement, explain how it would make the results of this experiment more conclusive.