

Yeast Investigation Handout

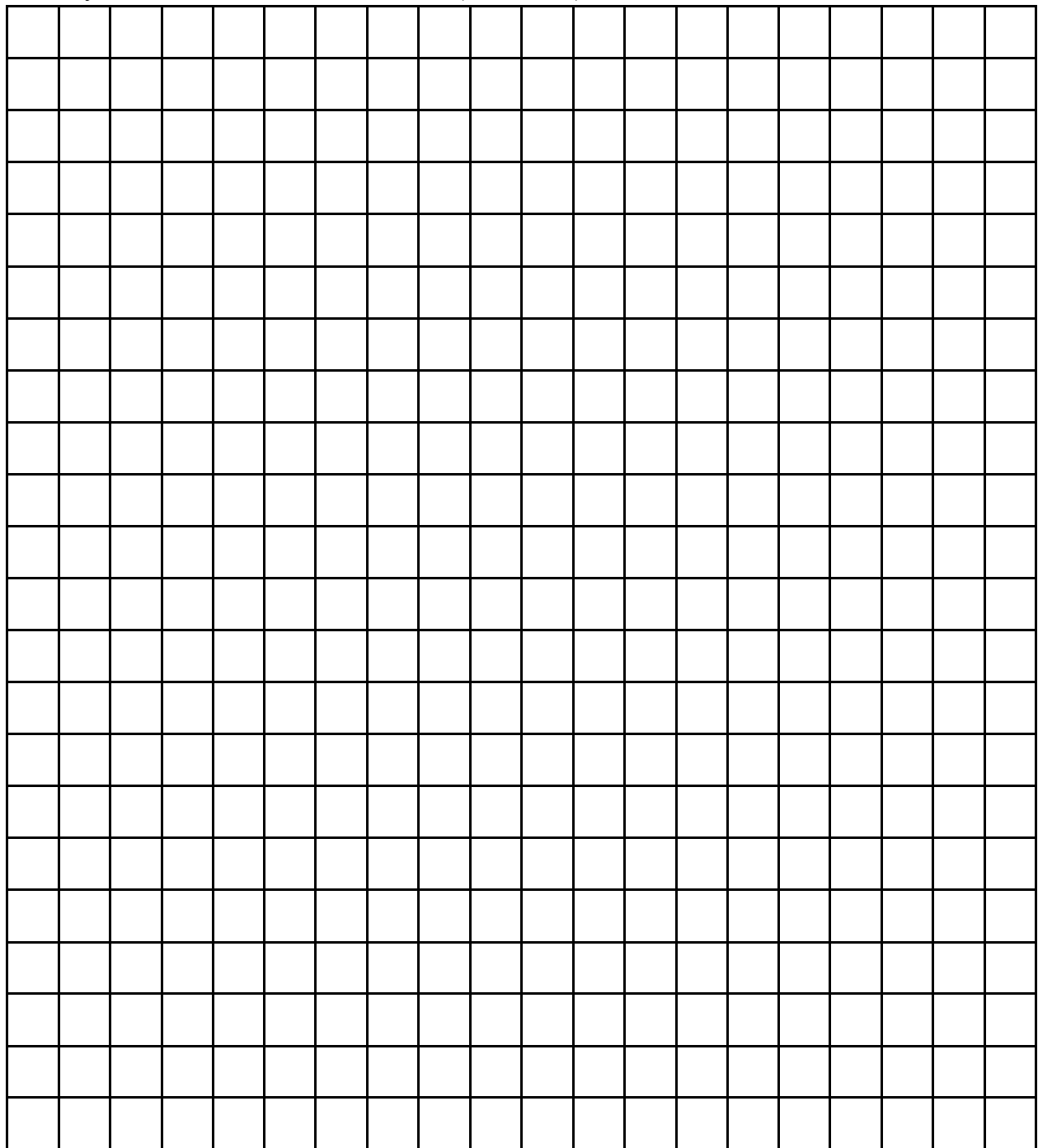
1. Make a prediction! After the yeast was activated, what do you think happened to the pH and CO₂ levels over time? Record your hypothesis here:

2. These are the data from both sensors every minute.

Time (minutes)	pH	CO ₂ (ppm)
0	7	357
1	7	426
2	7	413
3	7	486
4	7	771
5	7	1341
6	7	2163
7	7	3212
8	7	5104
9	7	8456
10	7	13138
11	6.9	18821
12	6.9	25194
13	6.9	31398
14	6.9	37432
15	6.8	42932

3. What gas does the yeast produce?

4. Create a graph of the change in pH and CO₂ concentration over time using the grid below. Label your axes, and include units. Time (in minutes) will be on the x-axis.



5. Examine your graph and the graph created by the other members of your group. Interpret the graphs.

Did the CO₂ concentration increase or decrease?

Did the pH increase or decrease?

6. What is the relationship between CO₂ and pH? Explain.

7. What do the results of your experiment mean for whether or not the relationship between CO₂ concentration and pH is a correlation or causation?