FLINN SCIENTIFIC

Name_____

Evolution of Yeast Worksheet

Data Table: Respiration Rates of Yeast Strains

Data Source	Yeast Strain	Respiration Rate (ppm/min)	Notes/Observations
Your Data	Baker's		
	(circle one) Brewer's or Wine		
Group 1	(circle one) Brewer's or Wine		
Group 2	(circle one) Brewer's or Wine		
Group 3	(circle one) Brewer's or Wine		

Post-Lab Questions for Introductory Activity

1. Perform a linear fit on the 10–15 minute section of the graph. Record the slope of the line, *m*, as the respiration rate (in ppm/min) in the data table. *Note:* During the first few minutes of the data-collection period, the glucose and yeast mixture warmed to the temperature of the water bath. Glucose in the mixture had to enter the cell and be metabolized to produce carbon dioxide gas. Accordingly, the first ten minutes of the data-collection period will not be used to determine the respiration rate.
2. Obtain data from two groups that investigated the type of yeast you did not. Obtain data from one group that investigated the same type of yeast that you did. For example, if you tested brewer's yeast in your second trial, find two groups that investigated wine yeast and one that investigated brewer's yeast. Record the respiration rates of their second trials in the data table.
3. Describe any differences in the respiration rates of the different types of yeast.
4. In the notes/observations section of the data table, record any interesting things you saw and anything done that was not in the written procedure.
5. Explain why there may be differences between your data and another group's data for the same yeast-type using these observations.
6. List factors that could possibly affect the evolution of different strains of yeast.