**AP Biology**

**Enzyme catalysis Pre-lab assignment**

<http://www.phschool.com/science/biology_place/labbench/lab2/intro.html>

\* Before coming to lab, you should identify the experimental characteristics below for the specified lab.

\* You may work in pairs or individually but copying another person's lab report is cheating. A grade of zero will be assigned for the lab if you are caught copying another person's lab report.

\*This is based upon experimental characteristics defined by AP exam readers.

1. State the hypothesis. Identify it as the hypothesis. You may use "If/Then" statements.

2. Identify the control group(s) that will be used for comparison. (It does not contain the variable being tested.)

3. Identify the dependent variable. (The one that will change; the experimental group)

4. Identify the independent variable. (The variable being manipulated)

5. Identify constant (any other variables that are being held constant) in the experimental group. For instance, each setup may be measured for the same amount of time; or each setup may have the same amount of solution in each beaker, etc.

6. Identify what is being measured

Example: (Carbon dioxide or water consumption; growth; production of oxygen, etc.)

7. What method and/or time frame is used?

Example: I will take readings of . . . . . every 5 minutes for 30 minutes.

8. What is the rate of calculation and/or statistical application?

Example: average of the data from a number of trials, slope of the curve, etc.

9. How will the results be verified? (Sample size or repetition)

10. How will the experimental results be presented? (Graphs, charts, etc.)

11. What are the expected results( prediction)? Why? This is your best prediction based on reading the lab and any other information you obtain. (Other sources on information can be your book, the Internet, Cliff’s notes, etc.)

12. Finally, sketch a diagram of the lab set up you will use, be complete and detailed.