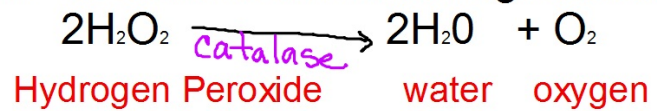


## Enzyme Lab

Purpose:

1. To observe the following reaction:



2. To observe different variables that may influence enzyme activity
3. To determine if enzymes can be reused.

**Materials & Procedure:**

Group Data: ml of gas production

1.  $H_2O_2$  + regular catalase

10 ml  $H_2O_2$  4 liver dots

2.  $H_2O_2$  + reused regular catalase

10 ml  $H_2O_2$  liver dots from part 1

3.  $H_2O_2$  + regular catalase + acid

10 ml  $H_2O_2$  4 liver dots 10 drops acid HCl

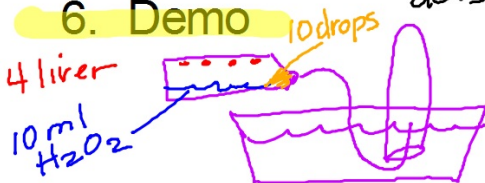
4.  $H_2O_2$  + regular catalase + base

10 ml  $H_2O_2$  4 liver dots 10 drops base NaOH

5.  $H_2O_2$  + cooked catalase

10 ml  $H_2O_2$  4 cooked liver dots

6. Demo



ml of gas produced

Class Data:

Group#	Setup1	Setup2	Setup3	Setup4	Setup5
1					
2					
3					
4					
5					
6					
7					
8					
9					
<b><u>Ave</u></b>					

**Data Analysis:**

Conclusion:

1. Define Enzyme and describe the lock and key theory.
2. What is a substrate? An active site?
3. Answer the Purposes of the experiment **USING DATA TO SUPPORT YOUR ANSWER.**
4. Explain the results.