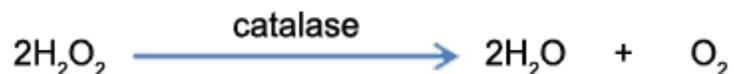


## Hydrogen Peroxide concentration

Hydrogen peroxide can gradually break down on its own, but this happens faster when an enzyme is used. When the enzyme *catalase* is added to hydrogen peroxide, **the following reaction occurs:**



But how is the **rate of this reaction** affected if the **concentration of the substrate**, *hydrogen peroxide*, is changed?

**In this task**, you will be using the equipment provided to determine how changing the concentration of *hydrogen peroxide* affects the **rate of reaction** of the *catalase* enzyme.

Concentration of H <sub>2</sub> O <sub>2</sub> (%)	Volume of Oxygen Gas Produced in 20 Seconds (ml)			
	Trial 1	Trial 2	Trial 3	Average
20	22.1	22.7	23.2	22.6
40	29.4	30.5	28.9	29.6
60	41.2	40.7	38.9	40.3
80	59.4	59.9	58.4	59.2
100	75.3	74.6	75.8	75.2

Complete the following

1. Aim
2. Independent and Dependent variables
3. Plot a Graph with the line of best fit.

4. Find the volume of oxygen for a concentration 110%
5. Write a conclusion