

Graphing

The Parts of a Graph

- **The Independent variable**
- **The Dependent variable**
- **The Scale**
- **The Legend**
- **The Title**

Independent Variable

Independent variable belongs on the X-axis of the graph (horizontal).

It represents the data that can be directly controlled by you.

Examples: time, depth, temperature, age, etc.

Dependent Variable

- **This variable is placed on the Y axis (Vertical).**
- **This variable depends upon the independent variable.**
- **Whatever happens to the independent variable the dependent variable should react to it.**
- **Example:**
- **If the temperature increases, the activity of the enzyme may increase or decrease.**

1:1B

- **The temperature is the independent variable while the enzyme's activity is dependent upon it.**

The Scale

- **The scale represents the range of values that applies to each variable.**
- **The scale must contain all the data values for each variable.**
- **The scale must occupy at least 3/4ths of the axis length.**
- **Use multiples that include these values.**

The Legend

- **This part of the graph explains the values represented on the X and Y-axis'.**
- **It is placed near the lower right area of the graph.**

The Title

- **The title should be a short statement representing what is found on the graph.**
- **Example: Enzyme Activity vs. Substrate Concentration**

1:1C

Example of a Completed Graph

