

Student Name: _____

Date: _____

Purpose

How do scientists analyze and interpret experimental data?

Materials

- * Provided data sets (3)
- * Graph paper
- * Calculator
- * Colored pencils

Procedure

1. Examine Data Set 1 (plant height over 4 weeks). Create a line graph with labeled axes.
2. Examine Data Set 2 (temperature vs. enzyme activity). Create a scatter plot and line of best fit.
3. Calculate mean, median, and mode for Data Set 3.
4. Calculate standard deviation for Data Set 3 using the formula provided.
5. Write a paragraph describing the trend in each graph.

Data / Observations Table

Data Set	Graph Type Used	Trend Observed	Mean	Median

Analysis Questions

1. For Data Set 2, describe the trend shown by your line of best fit.

2. In Data Set 3, which measure of central tendency best represents the data? Why?

3. What does a steep slope on a line graph indicate about the rate of change?

4. Identify any outliers. Should they be removed? Explain scientifically.

Conclusion

In my own words, what did I learn from this lab?
