

Title: Variation in Leaf Size

Purpose:

- To practice metric measurement
- To make quantitative observations
- To organize and graph data

Materials:

- 20 *Ficus* leaves
- metric ruler
- colored pencils
- calculator

Procedure:

1. Measure the length and width of 20 leaves to the nearest 0.01 cm
2. Record data in a data chart: remember to include units!
3. Calculate leaf area
4. Determine mean, median, and mode for length, width, and area
5. Graph length vs. area (length on x-axis) for your data

Results:

- Data chart for 20 leaves
- Graph

Discussion:

- Summarize what you did
- Describe the pattern of your data
- Are all leaves the same size?
- Is the ratio of area to length similar for all leaves? Provide evidence from graph to support your statement
- Was your area calculation accurate? (Hint: Are the leaves really rectangular?)
- Indicate possible sources of error (at least 2)
- Suggest improvements in activity design

Conclusion: ONE SENTENCE (10 words) TESTABLE STATEMENT

Reflection: Personal statement about the lab

REMINDER:

Date, Table of Contents, Units for all measurements, Titles for data charts and graphs,