

# SCIENTIFIC METHOD NOTES

## • FIVE STEPS TO THE SCIENTIFIC METHOD:

- 1. State the Problem
- 2. Form a Hypothesis
- 3. Test the Hypothesis
- 4. Collect and Analyze Data
- 5. Draw a Conclusion

# Vocabulary

- **Experiment** - the testing of a hypothesis in which one variable is changed at a time.
- **Control** - the factor not being tested.
- **Variable** - the factor being tested.
- **Data** - information gathered from observations and testing.
- **Quantitative Data** - data expressed by numbers or that can be measured.
- **Qualitative Data** - data represented by descriptions and characteristics.
- **Hypothesis** - proposed scientific explanation for a set of observations.
- **Law** - theory that has been tested over and over again with the same result.
- **Theory** - a well tested explanation that unifies a broad range of observations.