Scientific Method Objectives:

Define these key terms:

Scientific method data observation inference problem hypothesis procedure variable independent variable dependent variable control variables (constants) control group experimental group theory law

- Apply observation and inference skills to given examples.
- Identify independent, dependent, and control variables to case scenarios.
- List the 5 steps of the scientific method.
- Compare and contrast the difference between a problem and a hypothesis.
- Describe how a procedure should be written in an experiment.
- State the importance of using a data table and/or a graph after data is collected.
- Explain what is included in the conclusion of an experiment.
- Explain the difference between a theory and a scientific law.
- State how scientists can improve the reliability and validity of an experiment.