

Name \_\_\_\_\_

Date \_\_\_\_ / \_\_\_\_ / \_\_\_\_

# LOGIC OF SCIENCE AND THE SCIENTIFIC METHOD

Using the numbers 1-6, indicate the order of events in using the scientific method.

- \_\_\_\_\_ Test the hypothesis by performing an experiment.
- \_\_\_\_\_ Make observations and record data.
- \_\_\_\_\_ Make a hypothesis and an experimental prediction.
- \_\_\_\_\_ Identify the problem to be studied.
- \_\_\_\_\_ Use data and results to support a conclusion.
- \_\_\_\_\_ Perform background research on the problem.



Provide the letter of the definition that matches the scientific terms below.

- \_\_\_\_\_ 1. control
  - \_\_\_\_\_ 2. conclusion
  - \_\_\_\_\_ 3. hypothesis
  - \_\_\_\_\_ 4. experiment
  - \_\_\_\_\_ 5. variable
  - \_\_\_\_\_ 6. data
  - \_\_\_\_\_ 7. theory
- a) Using a set of observations to test a hypothesis.
  - b) an idea about the system being examined.
  - c) The numerical values recorded during an experiment or observation.
  - d) A decision based on the data from an experiment
  - e) A well-supported set of observations and explanations for natural events.
  - f) Set of observations used as a reference and compared to experimental observations in order to show that the result is due to the experimental treatment.
  - g) Name for the type of value measured that may vary in an experiment.

