

Scientific Inquiry

Name _____
Period _____

1. _____ is the investigation and exploration of natural events in order to solve problems or answer questions.
2. _____ is the study of matter and energy, and is often divided into two main branches: chemistry and physics.
3. _____ are the results of using one or more of your senses to gather information and taking note of what occurs.
4. An _____ is a logical explanation of an observation that is drawn from prior knowledge or experience.
5. _____ is a process that uses a variety of skills and tools to answer questions or to test ideas about the natural world.
6. Scientific inquiry often involves a series of steps that are used to solve a problem or answer a question. This series of steps is often called the _____.
7. A _____ is a possible explanation for an observation or answer to a scientific question that can be tested by scientific investigation.
8. A _____ is a statement of what will happen as a result of something else.
9. When performing an experiment, it is important to use a _____ in which only one variable is changed at a time.
10. _____ are any factors in an experiment that can change.
11. The factors in an experiment that do not change are called _____.
12. The one factor that is purposely changed by a scientist in order to test the hypothesis is called the _____.
13. The factor that is observed or measured during an experiment is called the _____.
14. A group that is used to study how a change in the independent variable changes the dependent variable is called an _____.

15. A controlled experiment may also have a _____, which is a group that contains the same factors as the experimental group, but the independent variable is not changed.

16. _____ are observations that don't involve numbers or measurements.

17. _____ are observations that are measurements, found using scientific tools or by counting the total number of objects in a group.

18. List the seven steps of the scientific method:

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____