

Name \_\_\_\_\_ Date \_\_\_\_\_ Class \_\_\_\_\_

**Introduction to Physical Science** ▪ *Review and Reinforce*

## Scientific Inquiry

### Understanding Main Ideas

Answer the following questions on a separate sheet of paper.

1. What processes are often involved in scientific inquiry?
2. What makes a hypothesis testable?
3. Why is it important to control variables in an experiment?
4. When you begin an experiment, why should you create a table to record your data?
5. How do scientists improve their understanding of the natural world?

### Building Vocabulary

Fill in the blank to complete each statement.

6. A(n) \_\_\_\_\_ is a possible explanation for a set of observations or answer to a scientific question.
7. Factors that can change in an experiment are called \_\_\_\_\_.
8. The sharing of ideas and experimental findings with others through writing and speaking is called \_\_\_\_\_.
9. A \_\_\_\_\_ is a statement that describes what scientists expect to happen every time under a particular set of conditions.
10. Facts, figures, and other evidence gathered through observations are called \_\_\_\_\_.
11. The factor that may change in response to the manipulated variable is called the \_\_\_\_\_.
12. An experiment in which only one variable is manipulated at a time is called a(n) \_\_\_\_\_ experiment.
13. The process of \_\_\_\_\_ refers to the diverse ways in which scientists study the natural world and propose explanations based on the evidence they gather.
14. A \_\_\_\_\_ is a well-tested explanation for a wide range of observations or experimental results.
15. The one variable that is purposely changed to test a hypothesis is called the \_\_\_\_\_.