Name _____ Class _____ Date _____

Section 1–1 What Is Science? (pages 3–7)

TEKS FOCUS: 2A Formulate hypotheses; 2B Collect data; 2C Make inferences; 2D Communicate valid conclusions; 3C Impact of research; **TEKS SUPPORT:** 2C Analyze Data

This section explains what the goal of science is and describes a scientific view of the world.

What Science Is and Is Not (page 3)

1. What is the goal of science? _____

_____

_____

2. What is science? _____

_____

Thinking Like a Scientist (page 4)

3. What is observation? _____

_____

_____

4. The information gathered from observation is called _____.

5. Complete the table about types of data.

TYPES OF DATA

Type	Data Involves . . .	Example
	Numbers	
	Characteristics that cannot be easily measured or counted	

6. What is an inference? _____

_____

_____

Explaining and Interpreting Evidence (page 5)

7. What is a hypothesis? _____

_____

Name_____ Class_____ Date_____

8. In science, a hypothesis is useful only if it can be _____.
9. Is the following sentence true or false? A hypothesis should be stated in such a way that it can never be proved wrong. _____
10. What are three ways from which hypotheses may arise?
    a. _____
    b. _____
    c. _____
11. Circle the letter of each of the following that may be an outcome of testing a hypothesis.
    a. The hypothesis is partly true but needs to be revised.
    b. The hypothesis is wrong.
    c. The hypothesis is supported.
    d. The hypothesis is of no value.

Science as a Way of Knowing (page 6)

12. What do scientists assume about the universe?

    _____

    _____

13. What are some qualities that are desirable in a scientist? _____

    _____

    _____

Science and Human Values (page 7)

14. Is the following sentence true or false? A community must use its shared values to make decisions about scientific issues. _____