

**Chapter 1 Science Skills**

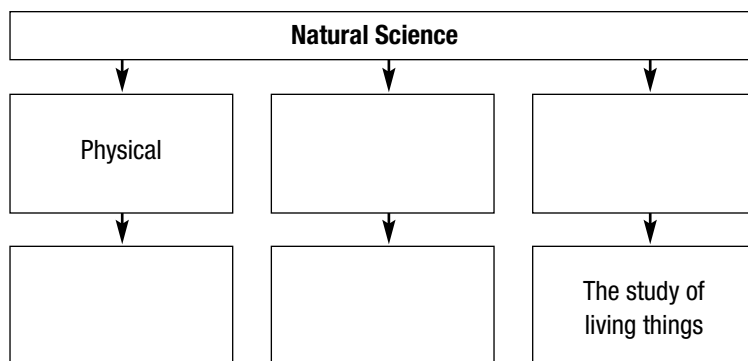
**Section 1.1 What Is Science?**

**(pages 2–6)**

*This section describes the characteristics of science and technology. It also discusses the big ideas of physical science.*

**Reading Strategy (page 2)**

**Previewing** Skim the section to find out what the main branches of natural science are. Complete the concept map based on what you have learned. For more information on this Reading Strategy, see the **Reading and Study Skills** in the **Skills and Reference Handbook** at the end of your textbook.



**Science From Curiosity (pages 2–3)**

1. Define science. \_\_\_\_\_  
\_\_\_\_\_
2. The questions that lead to scientific discovery are provided by \_\_\_\_\_.
3. Is the following sentence true or false? The results of every scientific experiment are quantitative. \_\_\_\_\_

**Science and Technology (page 3)**

4. Is the following sentence true or false? The use of knowledge to solve practical problems is known as curiosity. \_\_\_\_\_
5. How are science and technology related? \_\_\_\_\_  
\_\_\_\_\_

**Branches of Science (page 4)**

6. Name the two general categories that the study of science can be divided into.  
 a. \_\_\_\_\_                      b. \_\_\_\_\_
7. Circle the letters of each branch of natural science.  
 a. physical science                      b. Earth and space science  
 c. social science                      d. life science

### Chapter 1 Science Skills

- 8. Circle the letter of each sentence that is true about the field of chemistry.
  - a. Chemists study reactions involving matter.
  - b. Chemists study the composition of matter.
  - c. Chemists study the structure of matter.
  - d. Chemists study the properties of matter.
- 9. The study of matter, energy, and the interactions between the two through forces and motion is known as \_\_\_\_\_.
- 10. Identify the topics that are included in the science of geology.  
\_\_\_\_\_  
\_\_\_\_\_
- 11. Is the following sentence true or false? The foundation of space science is astronomy. \_\_\_\_\_
- 12. Scientists who study the origin and behavior of living things are called biologists, and the study of living things is known as \_\_\_\_\_.

### The Big Ideas of Physical Science (pages 5–6)

- 13. Is the following sentence true or false? All of the important rules of nature have already been discovered. \_\_\_\_\_
- 14. Circle the letter of each sentence that is true about the diameter of the observable universe.
  - a. It is one hundred million meters.
  - b. It is seven hundred billion meters.
  - c. It is seven hundred million billion meters.
  - d. It is seven hundred million billion billion meters.
- 15. Name the two characteristics of matter.
  - a. \_\_\_\_\_
  - b. \_\_\_\_\_
- 16. The basic building blocks of matter are called \_\_\_\_\_.
- 17. Is the following sentence true or false? A force causes a change in time. \_\_\_\_\_
- 18. Describe kinetic energy. \_\_\_\_\_  
\_\_\_\_\_
- 19. Two general types of energy are kinetic energy and \_\_\_\_\_ energy.

### Science and Your Perspective (page 6)

- 20. Is the following sentence true or false? The scientific facts of today will not change in the future. \_\_\_\_\_