

**Chapter 1 The Science of Biology**

**Section Review 1-1**

**Reviewing Key Concepts**

**Completion** *On the lines provided, complete the following sentences.*

1. Science investigates only the \_\_\_\_\_.
2. \_\_\_\_\_ involves using one or more of the senses to gather information.
3. An interpretation based on prior knowledge and experience is a(an) \_\_\_\_\_.
4. A possible answer to a scientific question that can be tested is a \_\_\_\_\_.

**Short Answer** *On the lines provided, answer the following questions.*

5. Explain the role of prior knowledge in making inferences.  
 \_\_\_\_\_  
 \_\_\_\_\_
6. Explain how observation, interpretation, and explanation are important to the study of science.  
 \_\_\_\_\_  
 \_\_\_\_\_

**Reviewing Key Skills**

7. **Comparing and Contrasting** Explain the difference between qualitative and quantitative observations. Give an example of each one.  
 \_\_\_\_\_  
 \_\_\_\_\_
8. **Applying Concepts** A student sits down at a computer and presses the power button. The computer does not turn on. What is a logical explanation as to why the computer does not work? How would the student test that idea?  
 \_\_\_\_\_  
 \_\_\_\_\_
9. **Comparing and Contrasting** What is the difference between observation and inference?  
 \_\_\_\_\_  
 \_\_\_\_\_
10. **Evaluating** A section of land is devoid of plants. A student stated the following hypothesis: Plants do not grow here because of lack of sunlight. Is this a valid hypothesis? Explain your answer.  
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