

Name: _____

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Date: _____

Scientific Inquiry
Reading Guide
Chapter 1
Section 2: pages 13-22

Please answer the following questions in complete sentences. Restate the question in the answer.

1. Define and explain the term scientific inquiry.

2. *A friend claims that ceiling fans are better than air conditioners because they cool air faster than the air conditioner. Could you investigate this claim through scientific inquiry? Explain.*

3. What kind of data would you need to carry out the experiment you described in question #2?

4. What is a hypothesis? Explain.

5. What is meant by saying that a hypothesis is testable? Explain.

6. *Every time you and your friend study for an exam while listening to classical music, both of you do well on the exam.* What testable hypothesis can you develop from your observations?

7. What is a scientific theory? What is a scientific law? Explain.

8. How do scientific laws differ from scientific theories? Explain.

9. Describe one way you use scientific "problem solving" thinking skills in your everyday life. Explain.

10. *Students who conducted the cricket experiment concluded that their results supported their hypothesis.* Can their hypothesis be called a theory? Why? Why not? Explain.

