

**Chapter 1 The Science of Biology**

**Section Review 1-2**

**Reviewing Key Concepts**

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

- 1. List some variables that can change in an experiment, and discuss the importance of a control group.

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- 2. Describe a historical experiment performed to test the theory of spontaneous generation. Be sure to identify the control and variable tested.

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- 3. What is a theory?

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**Reviewing Key Skills**

**Classifying** *On the lines provided, use the letters A–E to place the following steps of an experimental investigation in the correct order. (A is the first step, E is the last step.)*

- \_\_\_\_\_ 4. form a hypothesis
- \_\_\_\_\_ 5. record and analyze data
- \_\_\_\_\_ 6. draw a conclusion
- \_\_\_\_\_ 7. state the problem
- \_\_\_\_\_ 8. set up a controlled experiment

- 9. **Inferring** Why is it necessary for scientists to record and publish their experiments and results?

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- 10. **Applying Concepts** Can an experiment that has several variables be used to explain a theory? Explain your answer.

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