

Concept Review

Section: Studying Matter and Energy

Answer the following questions in the space provided.

1. What are the fundamental procedures in the scientific method?

2. Why is it important to publish the results of research findings?

3. When performing an experiment, why is it important to have a control?

4. What is a variable?

5. What is the definition of a model?

6. Why are models useful in chemistry?

Concept Review *continued*

In the space provided at the left of each word or phrase, write the letter of the expression on the right that is most closely related.

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| _____ 7. hypothesis | a. a well-tested explanation for a phenomenon based on observation, experimentation, and reasoning |
| _____ 8. theory | b. a reasonable and testable explanation of observations |
| _____ 9. scientific law | c. The products of a chemical reaction have the same mass as the reactants. |
| _____ 10. law of conservation of mass | d. a description of the natural world that has been proven reliable over time |