

## Section 16.2 Heat in Chemical Reactions and Processes

In your textbook, read about measuring heat and about chemical energy and the universe.

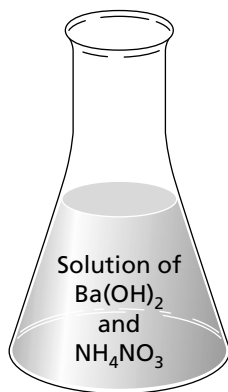
For each item in Column A, write the letter of the matching item in Column B.

### Column A

- \_\_\_\_\_ 1. An insulated device used to measure the amount of heat absorbed or released during a chemical or physical process
- \_\_\_\_\_ 2. The study of heat changes that accompany chemical reactions and phase changes
- \_\_\_\_\_ 3. The specific part of the universe that contains the reaction or process you wish to study
- \_\_\_\_\_ 4. The change in enthalpy in a chemical reaction
- \_\_\_\_\_ 5. A system plus its surroundings
- \_\_\_\_\_ 6. The heat content of a system at constant pressure
- \_\_\_\_\_ 7. Everything in the universe except the system being studied

### Column B

- a. system
- b. calorimeter
- c. thermochemistry
- d. universe
- e. enthalpy
- f. enthalpy (heat) of reaction
- g. surroundings



Use the illustration to answer the following questions.

8. A scientist is studying the solution in the flask. What is the system?

\_\_\_\_\_

9. What are the surroundings?

\_\_\_\_\_

10. What is the universe?

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