

Chapter 5

Use with Text Pages 134–137

REINFORCEMENT

● Temperature and Heat

Determine whether the italicized term makes each sentence true or false. If the statement is true, write the word “true” in the blank. If the statement is false, write in the blank the term that makes the statement true.

- _____ 1. The particles that make up a sample of matter have *kinetic* energy.
- _____ 2. The more mass a material has, the greater its *temperature*.
- _____ 3. As the temperature of a material increases, the particles move more *slowly* and their average kinetic energy becomes greater.
- _____ 4. Thermal energy is the *total* energy of the particles in a material.
- _____ 5. The energy that flows from something with a higher temperature to something with a lower temperature is *thermal energy*.
- _____ 6. Heat is measured in *Celsius degrees*.
- _____ 7. *Heat* and work both involve transfers of energy.
- _____ 8. At 22°C, a football has *less* thermal energy when it is sitting on the ground than when it is moving through the air.
- _____ 9. The kinetic and potential energy of the particles in a material determine its *thermal energy*.
- _____ 10. Different kinds of matter have different *thermal energies*.
- _____ 11. *Heat* energy flows from warmer to cooler materials.
- _____ 12. Mass, kind of matter, and the average kinetic energy of its particles determine the *temperature* of a material.
- _____ 13. Temperature is measured in *degrees*.
- _____ 14. The particles in a cup of cold coffee move more *quickly* than the particles in an equal-sized cup of hot coffee.
- _____ 15. Energy transferred when a force acts over a distance is *heat energy*.