

Chapter 6

REINFORCEMENT

Use with Text Pages 152–161

● Thermal Energy on the Move

Determine whether the italicized term makes each statement 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. Materials that are poor conductors are *poor* insulators.
- _____ 2. The transfer of energy through matter by direct contact of its particles is *convection*.
- _____ 3. The transfer of energy in the form of invisible waves is *conduction*.
- _____ 4. Solids usually conduct heat *better* than liquids and gases.
- _____ 5. The R-value of insulation indicates its *resistance* to heat flow.
- _____ 6. Air is a *poor* heat conductor.
- _____ 7. Wind and ocean currents are examples of *conduction* currents.
- _____ 8. Energy is usually transferred in fluids by *radiation*.
- _____ 9. As water is heated, it expands, becomes *less* dense, and rises.
- _____ 10. Dark-colored materials absorb *less* radiant energy than light-colored materials.
- _____ 11. Only radiant energy that is *reflected* is changed to thermal energy.
- _____ 12. The higher the R-value of insulation the *less* resistant it is to heat flow.

Circle the object in each pair that will take in more heat. In the blank, explain why that object will take in more heat.

13. a silver spoon, _____
a wooden log _____
14. a white shirt, _____
a red shirt _____
15. foil in the sun, _____
a sidewalk in the sun _____
16. single-pane window, _____
double-pane window _____
17. R-5 insulation, _____
R-35 insulation _____