Name Date Class

SECTION 2 Reinforcement

Transferring Thermal Energy

Directions: *Determine whether the italicized term makes each statement true or false. If the statement is true, write* **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.

Directions: *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 sunlight _____

a sidewalk in the sunlight _____

16. single-pane window _____

double-pane window _____

17. R-5 insulation _____

R-35 insulation _____

Meeting Individual Needs