_____ **9.** A substance generally expands when its _____ increases.

a. specific heat **b.** melting point
c. conduction **d.** thermal energy

_____ **10.** Absolute zero is

a. 273 K. **b.** 0 K.
c. 373 K. **d.** –273 K.

Fill in the blank to complete each statement.

11. _____ is the total energy of all of the particles in a substance.

12. The movement when heated fluid rises and is replaced by a cooler fluid is called a(n) _____ current.

13. The temperature at which a solid changes to a liquid is its _____.

14. A strip of two different metals joined together and often used in thermostats is called a(n) _____.

15. A(n) _____ is a device that transfers thermal energy from a cool region to a warm region.

Choose whether or not the statement is true or false. If you choose False, write the term that would make the statment true in the blank.

_____ **16.** On the Celsius scale, the number 0 is assigned to the temperatures at which water condenses.

_____ **17.** Heat is a transfer of thermal energy from a warmer object to a cooler object.

_____ **18.** A conductor such as a rug feels warm compared to a tile floor because it slows the transfer of heat from your skin.

_____ **19.** The state of a substance depends on the amount of thermal energy it possesses.

_____ **20.** Heat engines convert the thermal energy from combustion to mechanical energy.