

\_\_\_\_\_ 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 statement 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.