

21. Heat is transferred from one particle of matter to another without the movement of matter itself in a process called

- conduction.
- insulation.
- radiation.
- convection.

22. Which of these is a good conductor?

- silver
- wood
- air
- paper

23. A device that uses an outside energy source to transfer thermal energy from a cool area to a warm area is called a

- vaporizer.
- thermometer.
- refrigerator.
- combustion engine.

24. The amount of energy required to raise the temperature of 1 kilogram of a substance by 1 degree Celsius or Kelvin is called its

- change of state.
- melting point.
- heat transfer.
- specific heat.

25. No more energy can be removed from matter at

- absolute zero.
- 273 K.
- its freezing point.
- 0°C.

26. One common application of thermal expansion is

- a microwave oven.
- a toaster oven.
- a refrigerator.
- a thermometer.

27. The conversion of thermal energy into mechanical energy requires a

- thermometer.
- thermostat.
- heat engine.
- vaporizer.

28. Heat, like work, is an energy transfer measured in

- kelvins.
- degrees.
- watts.
- joules.

29. The temperature at which a solid changes into a liquid is called

- the melting point.
- the freezing point.
- the boiling point.
- absolute zero.

30. A measure of the average kinetic energy of the individual particles in an object is called

- thermal energy.
- temperature.
- conduction.
- convection.