

Vocabulary: Heat Conductivity



Vocabulary

- boiling point:*** The temperature at which the liquid form of a substance becomes a gas (vapor).
- conduction:*** The transfer of heat through a material or from one object to another by direct contact.
- Conduction occurs when energy is transferred from energetic molecules to less energetic neighboring molecules.
- convection:*** The transfer of heat through the movement of matter.
- In a *convection current*, a hot material rises while a cool material sinks. For example, heated air inside a hot-air balloon causes the balloon to rise.
- insulate:*** To isolate or separate in order to prevent change.
- If a material is well insulated, very little *thermal energy* will be lost to or absorbed from the surrounding environment.
- melting point:*** The temperature at which the solid form of a substance becomes a liquid.
- radiation:*** The transfer of energy through space or matter in the form of electromagnetic waves.
- Different types of radiation are distinguished by the wavelength of the waves.
 - Types of radiation (from longest to shortest wavelength) include radio waves, microwaves, infrared, visible light, ultraviolet, X rays, and gamma rays.
 - Most hot objects radiate heat in the infrared portion of the electromagnetic spectrum.
- thermal conductor:*** A material that readily allows heat to flow through.
- Most metals are good thermal conductors.
- thermal energy:*** Energy in the form of heat.
- The thermal energy of a substance is equal to the total kinetic energy of its atoms and/or molecules.
- thermal insulator:*** A material that resists the flow of heat.
- Nonmetals are usually good thermal insulators.