

Ch 5

Sec 5.2

HW:RC Notes; Sec 5.2 Written; Reinf Wks Sec 5.2

obj: How is thermal energy transferred in different states of matter?

Transfer of Thermal Energy

1) Conduction

- Transfer of thermal from particle to particle.

* Particles must collide w/ each other

* Occurs in solids and somewhat in Liquids.

* Metals are good conductors of heat.

2) Convection

- Transfer of Thermal Energy by the bulk movement of matter

* Creates Convection currents

* Only happens in Liquids + gases. (Fluids)

3) Radiation

- The transfer of thermal energy in the form of an electromagnetic wave.
- Waves can travel through a vacuum.
 - * Travel Through gases + Liquids.
- The wave (radiant energy) is absorbed by the particles in matter.
 - * The particles vibrate creating Thermal energy.
 - * Infrared Radiation is the electromagnetic wave that transfers Thermal Energy.