

Lesson 10 - Heat Transfer by Convection

Convection – the transfer of thermal energy through a liquid or gas.

In liquids and gasses, the particles are too far apart to collide with each other to pass on thermal energy by conduction.

Instead, thermal energy moves in convection currents (which are flowing particles).

Explanation of Convection Current

The particles above the heat source

1. gain kinetic energy,
2. move faster, and
3. spread out which
4. makes the air less dense (lighter) so
5. it rises.
6. Cool, more dense air falls and moves in to replace the warm air that has risen.