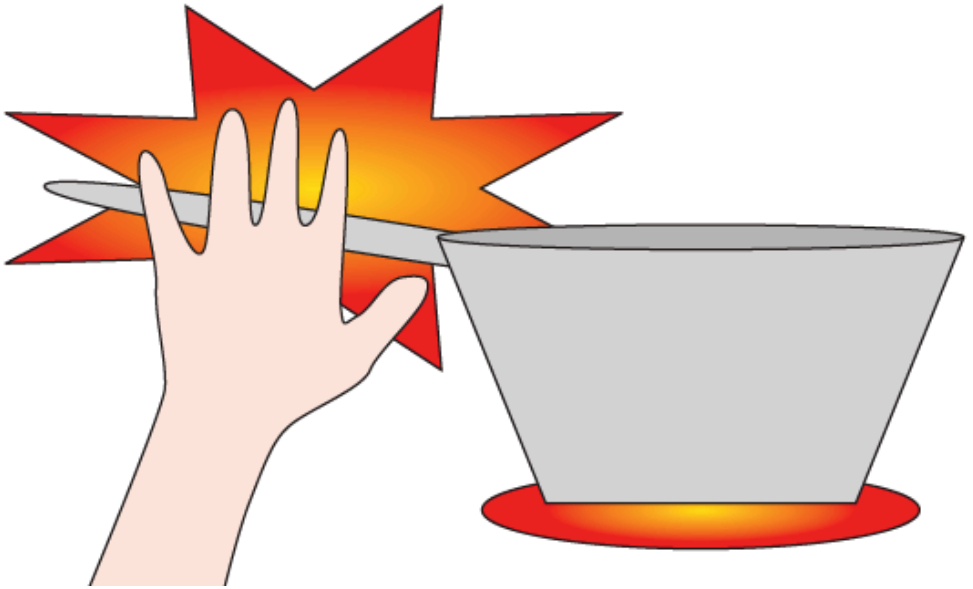
Heat Transfer

Picture Vocabulary

6.E 7.1 Heat Transfer

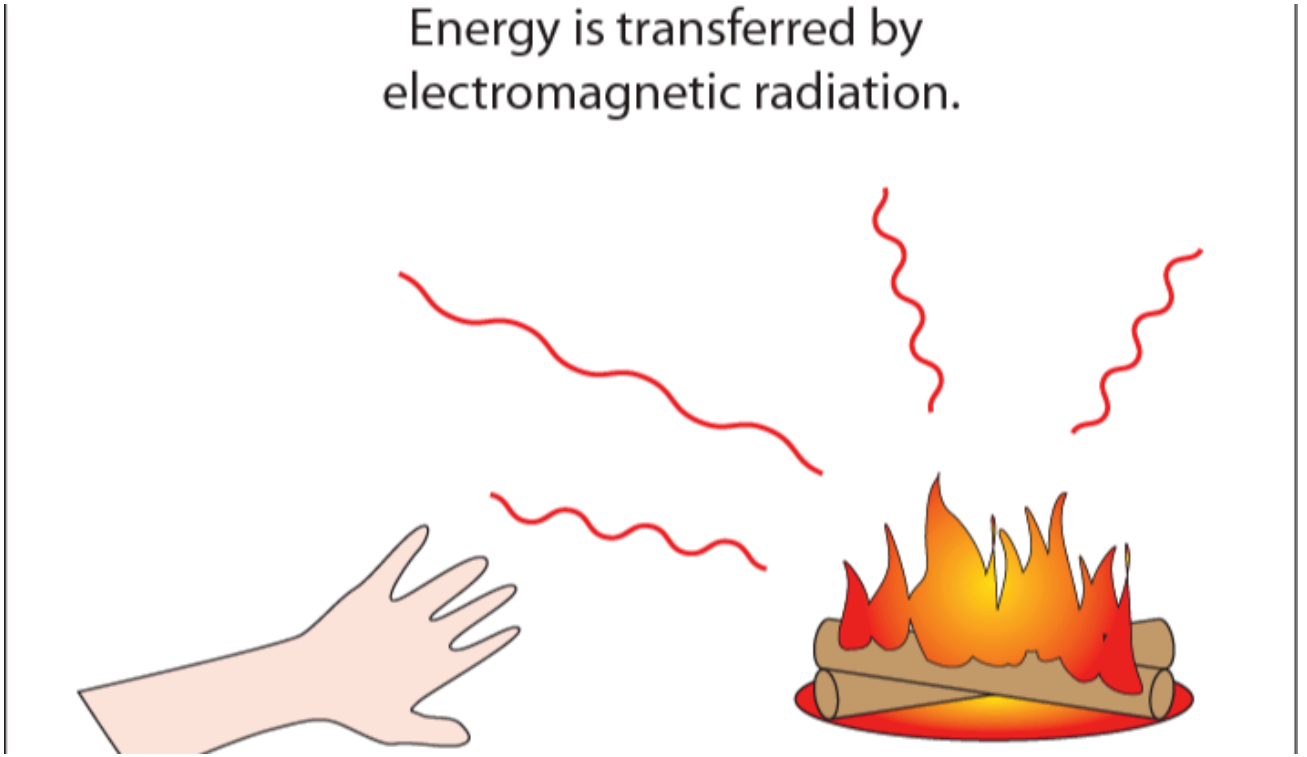
Conduction

Energy is transferred by direct contact.



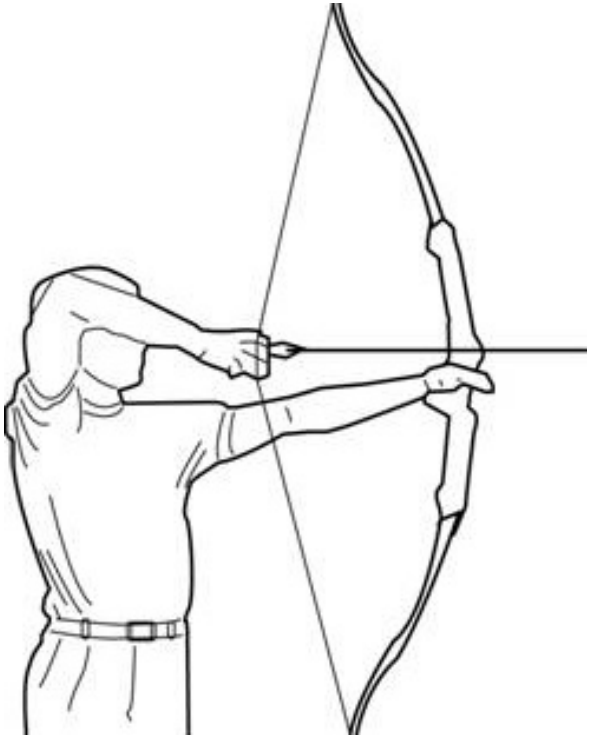
Transfer of thermal energy that occurs in solids, liquids, and gases when two substances of different temperatures touch

Radiant Heat (Radiation)



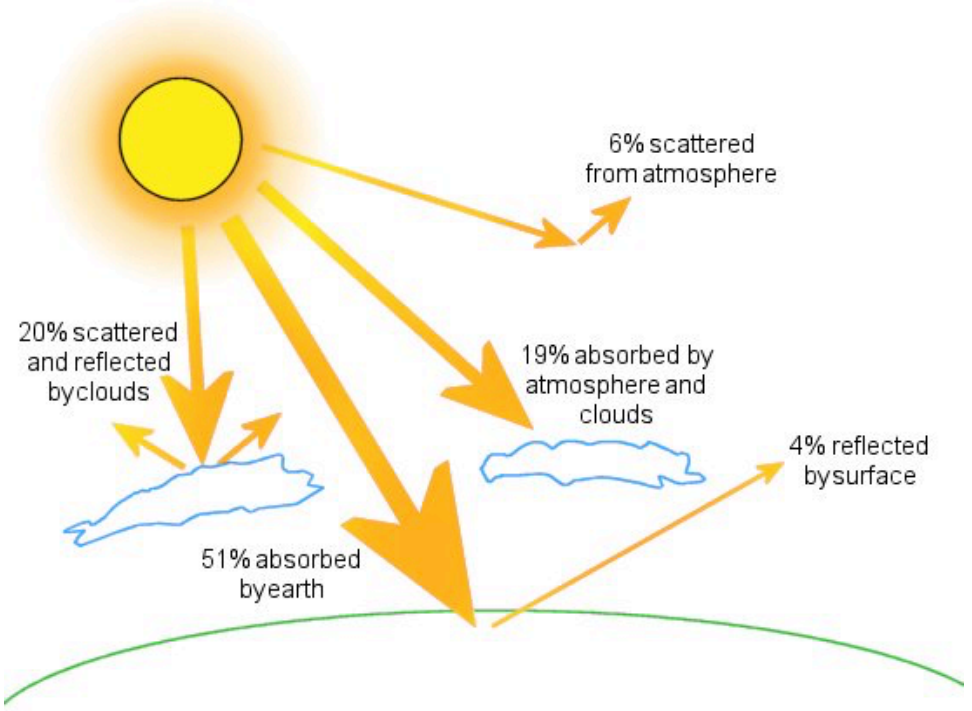
Energy from the Sun that reaches Earth as visible light, and ultraviolet and infrared (heat) radiation

Energy Transfer



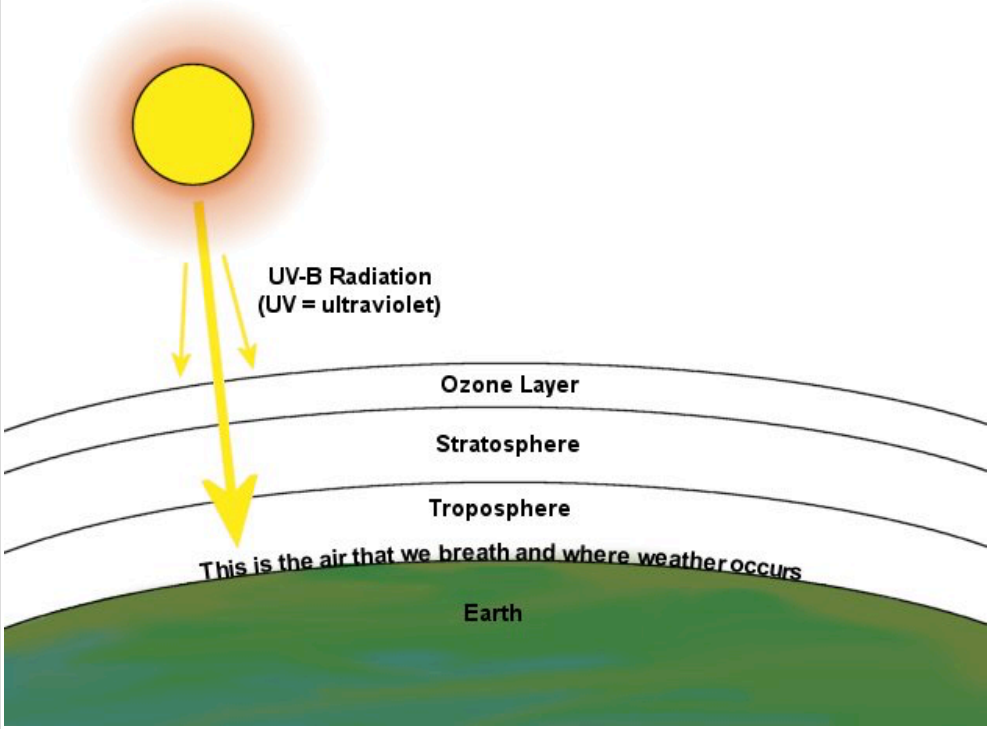
Movement of energy from one system to another

Thermal Energy



A form of energy internal to matter as the total kinetic energy (motion) of atoms and molecules in matter; the faster the atoms move, the warmer the matter

Atmosphere

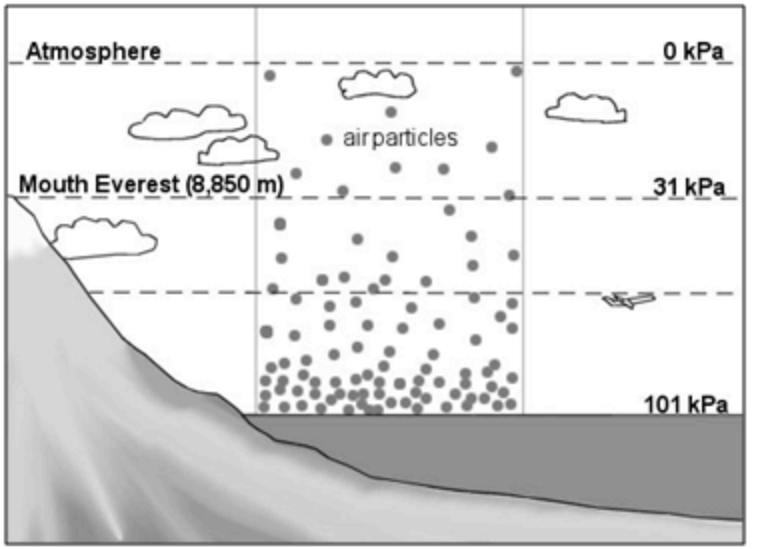


The whole mass of air surrounding Earth made up of 78% nitrogen, 21% oxygen, and other trace gases

Wind

A natural movement of air, sometimes with considerable force, from an area of high density and pressure to an area of low density and pressure

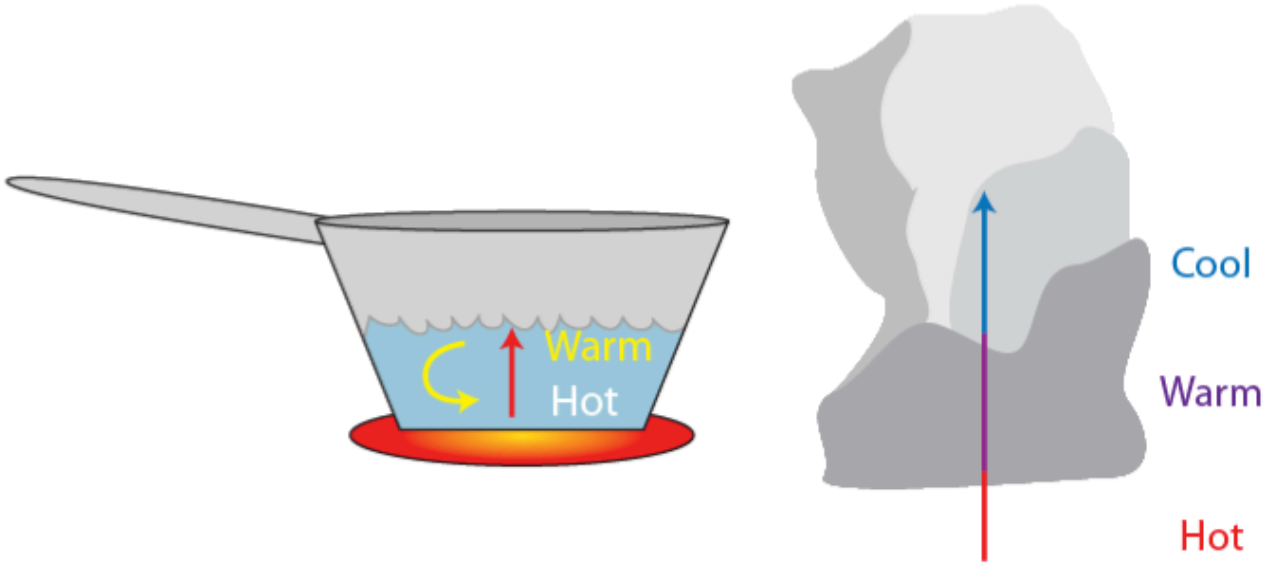
Air Pressure



Air pressure is greatest at sea level and lessens with increased distance from Earth's surface. Air molecules are more densely packed at sea level.

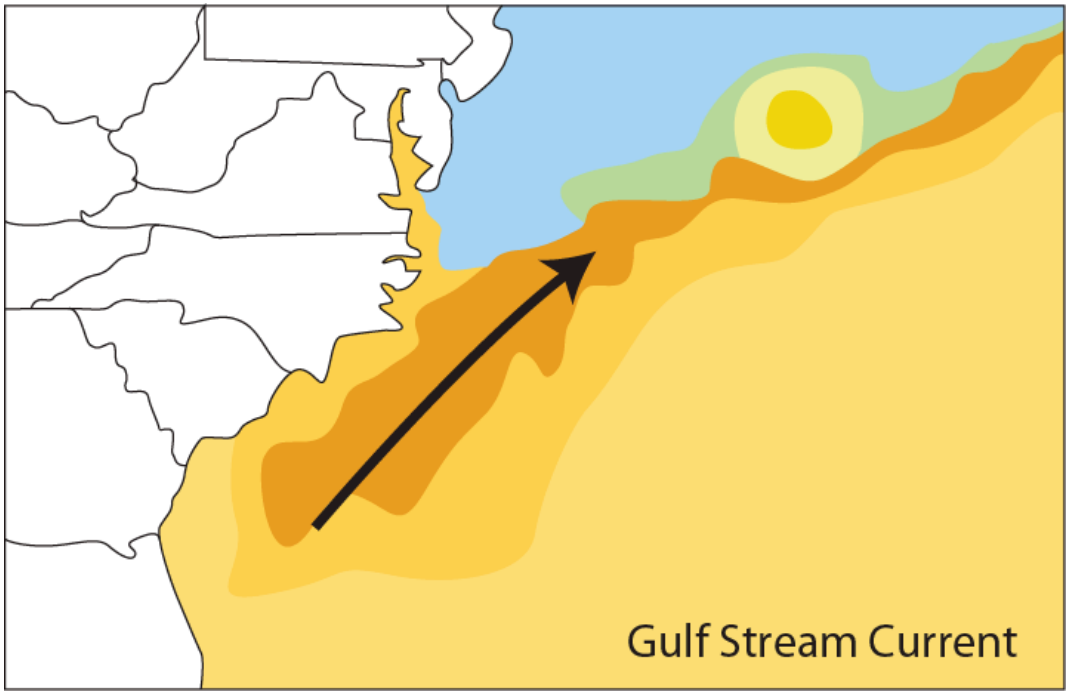
The force exerted by the atmosphere on Earth's surface by the weight of the air above the surface

Convection



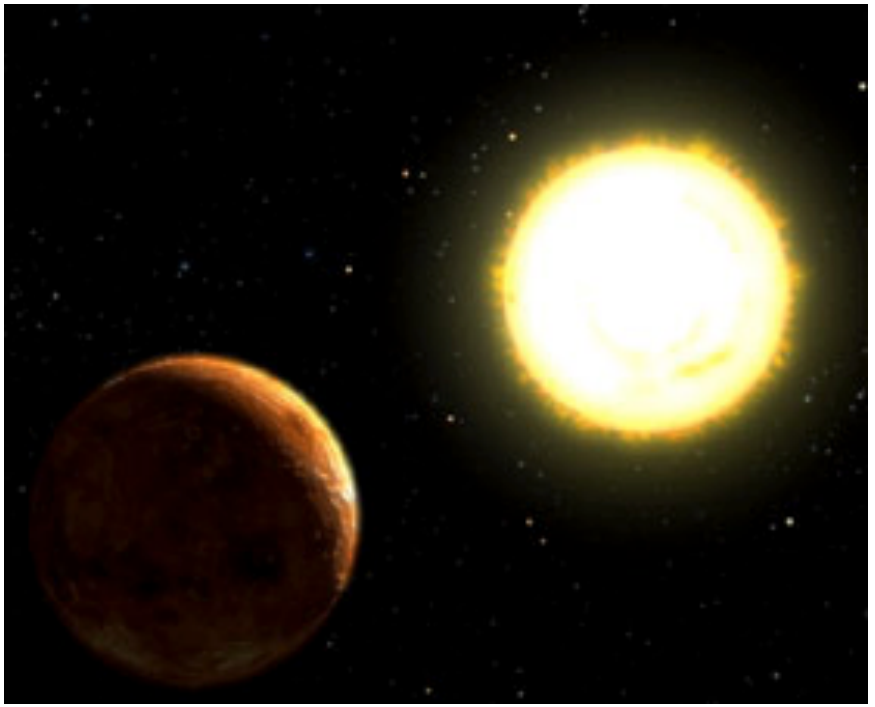
Transfer of thermal energy through circular motion caused by heating and cooling in fluids (liquids and gases)

Ocean Currents



A directional movement of ocean water; surface currents result from steady winds over the ocean surface; deep currents result from density variations due to temperature and salinity differences

Solar Radiation



The electromagnetic energy emitted from the Sun