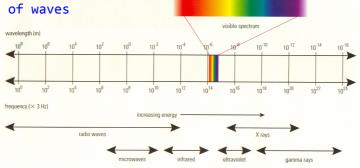
# Earth's Energy Balance

#### Radiation

• transfer of energy by means of waves

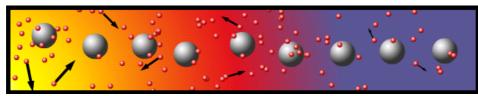


#### Electromagnetic spectrum

 $\bullet$  the set of waves that can travel through space at the speed of light

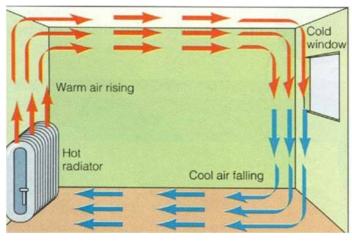
#### Conduction

 energy transfer mostly because of the collision of particles



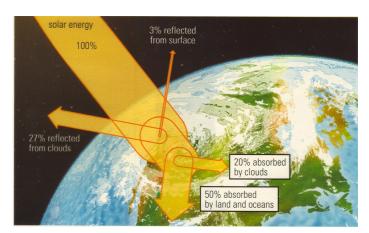
## **Convection**

- transfer of energy by the movement of particles in a fluid.
- fluid can be either a liquid OR a gas



### Reflection and Absorption

- 'albedo' is a measure of the amount of light that an object reflects
- any object or material that absorbs heat energy is called a 'heat sink'
- 'heat capacity' is a measure of an objects ability to absorb or give off heat energy as it heats up or cools down.



• high heat capacity means that it takes a lot of heat energy to increase the temperature, but it retains this heat longer.