**Vocabulary**

1. **Temperature:** microscopic motions of a single particle in the system per degree of freedom, NOT ENERGY. Measured in Kelvin (K), Celsius (C) or Fahrenheit (F).
2. **Heat:** Most intense in substances whose molecules are moving rapidly in a very disorderly way. Measured in Joules.
3. **Thermal Energy:** the total amount of energy.
4. **Conduction**- the direct transfer of heat between objects that touch.
5. **Convection**- the transfer of heat as a result of rising warm gas or liquid.
6. **Radiation**- the transfer of heat through space by waves.
7. **Heat transfer**- heat moving from a warmer object to a colder object.
8. **Conductor**- a material that transfers heat and energy well. (metals, glass)
9. **Insulator**- a material that does not transfer heat or energy. (plastic, wood, cotton)

**10. Law of conservation of energy**- It states that energy can be transferred from one system to another, but it cannot be created or destroyed.