

## 8<sup>th</sup> Grade Physical Science

Notes (11-11-09) Ch. 3 Sec. 2

- **Changes of State**
  - **energy of the particles determines state**
    - change the energy of particles will change the speed of particles which will lead to a change in state
  - **absorbing energy (endothermic) (+E)**
  - **releasing energy (exothermic) (-E)**
  - **5 changes of state**
    - melting (solid to liquid) (endothermic) (+E)
    - freezing (liquid to solid) (exothermic) (-E)
    - vaporization (liquid to gas) (endothermic) (+E)
    - condensation (gas to liquid) (exothermic) (-E)
    - sublimation (solid to gas) (endothermic) (+E)
  - **physical change – why?**
    - identity of the substance does not change
    - only the energy of the particles change