**Particle Theory Test Review**

* **Vocab: be able to use in an answer, and /or explain in own words**
  + Particle theory, theory
  + Particles, attraction, energy, heat, temperature
  + State of matter, solid, liquid, gas
  + Boiling, melting, condensation, freezing, sublimation (two uses)
  + Conduction, convection, radiation
  + Pure substance, mixture, solution, mechanical mixture, homogeneous mixture, heterogeneous mixture, solutes, solvents
  + Solubility, dissolving, unsaturated, concentrated, dilute, saturated, supersaturated
* **Big ideas:** 
  + **Particle theory** 
    - Know 4 main ideas of particle theory
    - Explain / diagram / label changes of state, and heating and cooling curves
    - Explain effects of heat on particles (hint: energy, volume, attraction)
  + **Heat & Temperature**
    - Know explain difference between heat and temp
    - Compare melting and boiling points of pure substances, and how that affects the use of those substances (*memorize water melt / boil temp)*
    - Know 3 different ways / forms of energy we can use to create heat
    - Difference between and examples of conduction, convention and
    - Insulators and conductors examples and explained
  + **Pure Substances, Solutions & Mixtures**
    - Differences (2) between pure substances & mixtures
    - Identify solutes and solvents in common solutions
    - Know 2 different kinds of mixtures, and how to tell the difference
    - Describe solutions and dissolving using particle theory
    - Explain 3 factors that affect solubility (ways speed dissolving)