**Honors Physics: study guide: energy, momentum, waves, etc.**

* **Know KE, PE, ME, and how to use basic formulae (short section)**
  + **This will be review, as we have hit it already**
  + **What is work?**
  + **What is power?**
* **Momentum (also, short section)**
  + **What is impulse?**
  + **Law of conservation of momentum**
* **Waves (bulk of test)**
  + **General properties: wavelength, frequency, period**
  + **Transverse vs. longitudinal: more nomenclature to know**
  + **Mechanical vs. electromagnetic**
    - **Appropriate calculations**
  + **Doppler effect…be able to describe, etc.**
  + **Reflection, refraction, diffraction**
    - **Understand idea behind Snell’s law, but I may not worry about calculations but know the direction of change (from air to denser medium for example)**
    - **What is the critical angle?**
  + **Understand interference…constructive vs. destructive**