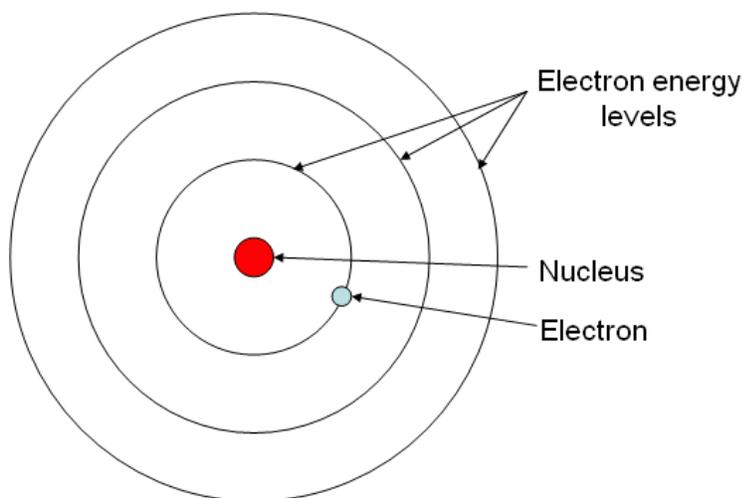

NAME:

1. Review Classwork #17.
2. Refer to Slide #3. What is a photon?

2. The diagram below shows an atom of Hydrogen with some of its possible electron orbits (three energy levels are shown). Electron is currently in its ground state.



- a. Suppose you HEAT the atom. On the diagram, show possible electron transitions (use arrows to indicate where the electron can go).
 - b. How many emission lines (distinct colors) can this configuration yield (remember, the excited electron needs to jump to a lower level to emit a photon)?
3. Refer to Slide #7. Look at the Pashen series of Hydrogen. What kind of light (ultraviolet, visible, infrared, etc) is that?