

Key Q's and Vocab – Periodic Trends

Vocab:

1. **Orbital** - the region of space in which an electron is found (ie NOT A PATHWAY!!!)
2. **Bohr Model** – one dimensional model of an atom that can be used to predict/justify atomic trends
3. **Quantum mechanical model** – current accepted model of a 3-dimensional atom where quantum numbers describe electron location within the electron cloud.

Key Questions:

1. Looking back at PES diagrams justify why photoelectron spectra plots support the quantum mechanical model and not the Bohr model.
2. Briefly justify why the 4th quantum number is necessary.