


Unit #3: Vocabulary

Definitions are found on Miss Virga's website: missvirga.weebly.com

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|-----------------------------------|---|
| Rutherford's Gold Foil Experiment | 2 main conclusions: ① atom is mostly empty space ② atom has a small, dense, positively charged nucleus |
| Bohr Model |  electrons orbit nucleus in energy levels/shells |
| Proton | \oplus charged subatomic particle, located in the nucleus, <u>identifies</u> the element (atomic #) |
| Neutron | neutral (\emptyset charge) subatomic particle, located in the nucleus |
| Electron | \ominus charged subatomic particle, located in orbitals outside nucleus |
| Mass number | the total # of protons + neutrons |
| Atomic number | the # of protons in the nucleus |
| Nuclear charge | charge of the nucleus (equals atomic #) |
| Average atomic mass | <u>weighted</u> average of all the naturally occurring isotopes of an element |
| Lewis Dot Diagram | Shows element symbol & # of <u>valence</u> electrons |
| Electron configuration | given on P.T., tells the # of electrons in each electron shell |
| Valence electrons | the outermost electrons (last # of electron conf.) * responds |
| Excited and ground states | electron conf. on P.T. \rightarrow ground state excited state is when e^- jumps to a higher level |
| Bright line spectrum | used to identify elements, produced when e^- move from excited state back to ground state |

Isotope: atoms of same element w/ diff. masses