

Name: _____
 Science 7

Date: 4-23-18
 Chemistry

Goal: I can describe the structure of an atom.
 Now:

Notes:

Chemical Symbols:

- An abbreviated way to write the name of the element
- Consists of one capital letter or a capital letter followed by a lower case letter

Examples: Potassium - K Sodium Chloride - NaCl

Matter and Atoms

- Atoms are the basic building blocks of matter.
- Made of subatomic particles called protons, neutrons and electrons.
- Scientists have confirmed the existence of 6 known QUARKS, which make up protons and neutrons.

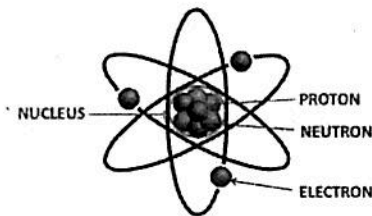
Protons

- Positively Charged (+1)
- Located in the atom's nucleus
- Mass = 1 AMU (atomic mass unit)
- The atomic number of an element is equal to the number of protons in an atom of that element.



Neutrons

- No charge (0)
- Located in the atom's nucleus
- Mass = 1 AMU (atomic mass unit)



Electrons

- Negatively Charge (-1)
- Located outside of the nucleus in the electron cloud
- Mass = 1/1836 AMU
- In a neutral - atom, the number of protons is equal to the number of electrons.

Subatomic particle	Proton	Neutron	Electron
Abbreviation/symbol	<u>P</u>	<u>N</u>	<u>E⁻</u>
Location	<u>nucleus</u>	<u>nucleus</u>	<u>electron cloud</u>
Charge	<u>+1 (positive)</u>	<u>0 (no charge)</u>	<u>-1 (negative)</u>
Mass	<u>1 AMU</u>	<u>1 AMU</u>	<u>1/1840 AMU</u>