<u>Atom</u>: The smallest particle into which n element can be divided and still have the properties of that element.



Neutron: A particle with no charge that is located in the nucleus of the atom. (0) Mass # - Atomic # = Neutrons.



Nucleus: The center of an atom, containing the protons and neutrons. It has on overall charge of (+).



Proton: A positively- charged particle that is located in the nucleus of the atom (+) They can be identified by looking at the atomic number.



Electron: A negatively- charged particle that is located outside the nucleus of the atom. (-) There are the same number of protons and electrons in an atom and can be identified by the Atomic #.



Electron Cloud: The region of the atom where electrons may be found. It has an overall charge of of (-).



Atomic Number: The number of Protons in the Nucleus of an atom. Atomic number identifies the element. Atomic # = Protons = Electrons



 Atomic mass

 Mass Number: The sum of the protons and Neutrons.

 Mass Number – Atomic Number (protons) = Neutrons.



Energy level/ Orbital: A specific Area in an Atom at a definite distance from the nucleus where electrons are arranged.

1st Orbital holds 2 electrons, 2nd orbital holds 8, 3rd orbital holds 18 (but is happy with 8)



Alkali Metals- Elements that form alkali solutions when they combine with water. These elements have one valence electron, and therefore react easily with other elements and are found in nature only in compounds. These elements are in group 1 on the periodic Table.



Element- A pure substance that cannot be broken down into simpler substance.

Alkaline Earth Metals: The elements in group 2 on the Periodic Table. These elements are very reactive but are less reactive that alkali metals; their atoms have two valence electrons.

Molecule: A substance made of two or more elements that are chemically combines.

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Halogens: Element that are in group 17 on the Periodic Table. These elements are very reactive; their atoms have seven valence electrons.

Nobel Gasses: Elements that are in group 18 of the Periodic Table. These elements are non-reactive nonmetals; their atoms have eight valence electrons (exceptions: Helium,- contains 2 valence electrons)

Group/ Families: A vertical column of elements on the periodic table. It indicates the number of valence electrons. Elements in the same column react similarly.

<u>Periods</u>: A horizontal row of elements on the periodic table. It indicates the number if orbitals.

Physical property: A property of a substance that can be observed without changing the identity of the matter.

<u>Chemical Property:</u> A property of a substance that can be observed without changing the identity of the matter.

