Place the symbol for each clue found on the back of this page into the appropriate location on the periodic table below. **Do Not Place** the "REAL" symbols for the elements.

Each Starting Letter Type represents a different Family. Symbols do not match "real" symbols of elements (Ca is not Calcium)

- Aa Is found in group 13 (3A) and period 6
- Ab is a light weight metal with an atomic mass of 26.98 amu
- Ac has a single electron in the 2p sublevel
- Ad is a metal represented by $5s^24d^{10}5p^1$
- Ae is found in period 4
- Ba is a period 4 nonmetal known since 1650 along with its medical side effects
- Bb was originally called stibium. Also the state of marriage between two ants
- Bc is a metal with atomic number 83
- Bd has 3 electrons in the 3p sublevel
- Be is the most abundant element in the atmosphere
- Ca is the first alkali metal with a completed 3d sublevel
- Cb has a first ionization energy of 418 kg/mol
- Cc derived its name from the Latin word for stone, lithos
- Cd has a single electron in the 1s orbital
- Ce can be collected as a silver liquid in the electrolysis of table salt
- Cf is an alkali metal located in period 6
- Da is a halogen whose crystals sublime
- Db has an atomic radius of 79 pm
- Dc forms a diatomic gas and reddish brown liquid
- Dd has the highest ionization energy of any halogen. It is very reactive.
- De Is a Metalloid
- Ea is a transition metal with 30 protons
- Eb is a liquid metal, originally called hydragyrum (meaning silver liquid)
- Ec is located between scandium and vanadium
- Ed is a by product of fossil fuel oxidation, and represented by the symbol V
- Ee is located in period 6, beneath niobium
- Ef has 42 protons within its nucleus
- Eg was originally called wolfram
- Eh is a member of group 5 and period 5
- Ei is represented by the symbol Mn
- Ej group 8 metal that names a historical period
- Ek has an average atomic mass of 58.93 amu
- El has a nuclear charge of +45
- Em has 114 neutrons within its nucleus
- En is an inert metal often used in electrodes and has an atomic number of 78

- Eo is named after the Latin word for rainbow, iris
- Ep has an atomic mass of 106.4 amu
- Eq is located between iron and osmium
- Er is an element named after the German word for
- Es electron config. ends in 3d⁴
- Et is represented by the symbol Zr
- Eu is a transition metal with an atomic number of 39
- Ev was originally identified by its Latin name, argentum
- Ew has a density of 8.94 g/cm³
- Ex derived its name from the Latin work for shining dawn, aurum
- Ey possesses a nuclear charge of +48
- Ez largest atomic radius of family in period 4
- Fa compounds of this metal produce red fireworks
- Fb is an alkaline earth metal located in period 3
- Fc is an alkaline earth metal located in period 6
- Fd is the metallic component of the substance limestone or marble
- Fe has an atomic radii of 112 pm
- Ha is a very dense metal with an atomic mass of 207.2 amu
- Hb is the second most abundant element found I the earth's crust. It is found in such substances as sand and quartz
- Hc derives its symbol from the Latin work, stannum
- Hd is the element whose common isotopic form is the basis of the atomic mass unit (amu)
- He in period 4
- Ia is a member of group 16 (6A), known during the time of the Roman empire
- Ib is represented by the symbol Se
- Ic is the most abundant element in the earth's crust
- Id has an atomic mass of 127.6 amu
- le electron config. ends in 6p³
- Ja superman's planet was named after this element
- Jb the only noble gas with 2 valence electrons
- Jc often used in fluorescent lights or bright color
- Jd the heaviest noble gas, tested for in basements
- Je electron config. ends in 5p⁶
- Jf has the same electron config. as a K⁺ ion