Name: Bailey Proctor

Element Yearbook: Biographical Worksheet

Element Name: Aluminium Element Symbol: Al

Atomic Number: 13 Group name/ number: 13 / Boron family

Atomic Mass (to nearest thousandth): 26.9815

Number of protons: 13 Number of neutrons: 14

Number of electrons: 13 Number of valence electrons: 1

Electron configuration:

Orbital filling diagram

Final electron configuration: $1s^2\ 2s^2 2p^6\ 3s^2 3p^1$

HISTORY

Discovered by: Hans christian Oersteed

Year discovered: 1825 Where discovered: Denmark

Derivation of name/symbol: From latin word "Alumen" / Al

PHYSICAL AND CHEMICAL CHARACTERISTICS

Phase at room temperature: Solid

Density at room temperature (g/cm^3): 2.7 g/cm^3

Melting Point (K, °C, °F): 1221 °F 660 °C 933.32 K

Boiling Point (K, °C, °F): 4566 °F 2519 °C 2792 K

Color: Silver Odor: iron/steel odor Oxidation state(s): +1 +2 +3

Ionic or covalent bonding: Binary Covalent bonding

Ionization Energy (first) (kJ/mol): 222315 kJ/mol

Electronegativity (Pauling): 1.16 1.61

Reactivity with oxygen, water, acids or bases:

-3

Name: _____

CURRENT INFORMATION

Where found (specific minerals or sources/specific countries):

China new Zealand, Russia, Canada, Brazil, Indonesia, and the United States is where aluminium is found mined as bauxite.

Uses:

tubes, pipes, pots, pans, cans, planes, auto body parts, engine parts, electrical towers, aluminum foil

Toxicity/hazards:

Aluminum is a non to low toxic element as proven with it's many uses in food and packing industries does accumulate in body tissues?

Abundance:

Aluminum is the worlds most abundant metal in the world most commonly found in a compound state

Sources used to gather this information:

1) Wikipedia.com
2) Aluminum.org
3) web elements.com