|  |  |  |  |
| --- | --- | --- | --- |
| Term/Definition | Trend | Why? | Exception |
| Atomic Radius |  |  |  |
| Ionic Radius |  |  |  |
| Ionization Energy |  |  |  |
| Electron Affinity |  |  |  |
| Electronegativity |  |  |  |

The development of the periodic table is contributed to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

The charge that the outer electron feels is called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (Zeff)

Zeff, is found this way: Z=

Zeff = Z − S S=

**Metals vs. Non-metals**

Metals form \_\_\_\_\_\_\_\_\_\_\_ and non-metals form \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Metals tend to be \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, malleable, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and \_\_\_\_\_\_\_\_\_\_\_\_\_\_ conductors of heat and electricity.

Non-metals tend to be \_\_\_\_\_\_\_, brittle substances that are \_\_\_\_\_\_\_\_\_\_\_\_ conductors of heat and electricity.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_have some characteristics of metals, some of nonmetals.

**Group Trends**

|  |  |  |
| --- | --- | --- |
| Group Name | Characteristics | Location |
| Alkali Metals |  |  |
| Alkaline-Earth Metals |  |  |
| Halogens |  |  |
| Noble gases |  |  |