|  |  |  |
| --- | --- | --- |
| **EVERYTHING is about...**1.
2.

image2.jpeg**Shielding Effect**Inner shell electrons \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the outer \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ electronsKeeps valence electrons from feeling the:**Effective Nuclear Charge (Zeff)**The relative \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the valence electrons have for the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in the nucleus.Learn Electron Orbits in Rutherford Model - Problems L1 in 3 minutes.Adding a proton has a \_\_\_\_\_\_\_\_\_\_\_\_ effect than adding an e- .Zeff = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Z = nuclear attraction = # protonsS = core/inner e- shielding the valence e- = total number of e- minus the e- in the  highest occupied s and p energy levelsMagnesium:Aluminum: | **Radius**What is it? INCREASES DOWN because.... Increased or Increased Shielding Nuclear Charge*
*
*
*

DECREASES TO RIGHT because.... Increased or Increased Shielding Nuclear Charge*
*
*

**Ionic Radius**  Cations Anions**Isoelectric Species**Atoms/Ions that have the same # of \_\_\_\_\_\_\_\_* Increased protons pull \_\_\_\_\_\_\_\_\_\_\_\_\_\_

on valence electrons. * Radius ends up \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

N-15 |  |
| **Ionization Energy**What is it? DECREASES DOWN because.... Increased or Increased Shielding Nuclear Charge*
*
*
*

INCREASES TO RIGHT because.... Increased or Increased Shielding Nuclear Charge*
*
*

**Subsequent Ionizations*** Each time e- removed 🡪 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to take next one
* Radius is getting \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 🡪\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ attraction
* HUGE leap in I.E. once it achieves

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_08_01_TableN-15 | **Electronegativity**What is it? DECREASES DOWN because.... Increased or Increased Shielding Nuclear Charge*
*
*
*

INCREASES TO RIGHT because.... Increased or Increased Shielding Nuclear Charge*
*
*
 |  |
| **Reactivity**What is it? METALS INCREASE DOWN because.... Increased or Increased Shielding Nuclear Charge*
*
*
*

NON-METALS INCREASE UP because.... Increased or Increased Shielding Nuclear Charge*
*
*
*
 | **Image result for periodic trends**  |  |

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