

Ionization Energy and Electronegativity Guided Notes**Ionization Energy:**

--the _____ required to remove a _____ from an atom

-- Which elements would require a LOT of energy to remove an electron? Explain.

-- Which element would NOT require a lot of energy to remove an electron? Explain.

High Ionization Energy means _____

Low Ionization Energy means _____

Which element has the highest ionization energy? _____

Which element has the lowest ionization energy? _____

Explain why you think this is so:

Practice: Which element in each pair has the higher ionization energy?

- Mg or S
- N or As
- Cl or Ar
- Si or Ge

Electronegativity:

-- the ability of an element to _____ an _____.

-- Which elements would really like additional electrons? Why?

--Which element would not like additional electrons? Why?

Which element is the most electronegative? _____

Which element is the least electronegative? _____

Practice: Which element in each pair has the higher electronegativity?

- Mg or O _____
- N or As _____
- Cl or Ne _____
- Si or Sn _____

Check For Understanding

1. P or Cl, which has the *higher*:

- a. Atomic radius _____
- b. Ionization energy _____
- c. Electronegativity _____

2. Ca or Ba, which has the *lower*:

- a. Atomic radius _____
- b. Ionization energy _____
- c. Electronegativity _____

3. N^{3-} or F^- which has the *larger* ionic radius? _____