

Name: _____

Block: _____

Electronegativity & Ionization Energy

For each of the following:

- i. Circle the correct answer.
- ii. Give the letter(s) indicating the correct direction on the periodic table that corresponds with the answer. (Note: more than one letter may apply.)
 - (a) Farther to the right on the periodic table.
 - (b) Farther to the left on the periodic table.
 - (c) Higher up on the periodic table.
 - (d) Lower down on the periodic table.
 - (e) None of the above.
- iii. Write a short explanation of *why* (not how) the applicable periodic trend changes as you move across or up and down on the periodic table.

_____ 1. Which element has a *higher* first ionization energy: Na or Al?

Direction:

Explanation:

_____ 2. Which element has a *higher* first ionization energy: Mg or Ca?

Direction:

Explanation:

_____ 3. Which element has a *lower* second ionization energy: K or Ca?

Direction:

Explanation:

_____ 4. Which element has a *lower* second ionization energy: Sr or Ba?

Direction:

Explanation:

_____ 5. Which element has a *higher* first ionization energy: K or B?

Direction:

Explanation:

_____ 6. Which element has a *lower* first ionization energy: Rb or P?

Direction:

Explanation:

_____ 7. Which element is *more* electronegative: Li or K?

Direction:

Explanation:

_____ 8. Which element is *more* electronegative: P or Cl?

Direction:

Explanation:

_____ 9. Which element is *more* electronegative: Al or N?

Direction:

Explanation:

_____ 10. Which element is *less* electronegative: Mg or Rb?

Direction:

Explanation: