

Name _____

Period _____

Periodicity Homework #2

- 1) Define Atomic Radii.

- 2) Define Electronegativity.

- 3) Define Ionization Energy.

- 4) Define Electron Affinity.

- 5) Draw a simple periodic table and show the trend in atomic radii.

- 6) Draw a simple periodic table and show the trend in electronegativity.

- 7) Draw a simple periodic table and show the trend in ionization energy.

- 8) Draw a simple periodic table and show the trend in electron affinity.

- 9) Why does a cation get smaller after it loses electrons?

10) Why does an anion get bigger after it gains electrons?

11) Why are the alkali metals so reactive?

12) Why are the Nobel gases so un-reactive?

13) Why does a group 17 element gain only one electron?

14) In the following pairs circle the species that is larger:

Na versus K

He versus Ne

B versus C

Cl versus F

Br versus I

Na versus Mg

Ar versus K

Li versus Ne

15) In the following pairs circle the species that is larger:

Na⁺ versus Na

F versus F⁻

O²⁻ versus F⁻

Na⁺ versus F⁻

Mg versus Mg²⁺

F⁻ versus I⁻

Al versus Al³⁺

Cl⁻ versus F⁻

16) In the following pairs circle the species that has the larger ionization energy:

Na versus K

F versus Br

B versus C

Cl versus Ar

Br versus I

Na versus Mg

Ar versus K

Li versus Ne

17) In the following pairs circle the species that has the larger electronegativity:

Na versus K

F versus Br

B versus C

Cl versus Ar

Br versus I

Na versus Mg

Ar versus K

Li versus Ne