

Name: _____

Class/Period: _____

Assignment: 10-31 and 11-1

Teacher: Thibodeau

- 1 An atom of which element has the strongest attraction for electrons in a chemical bond?
 - 1 chlorine
 - 2 carbon
 - 3 phosphorus
 - 4 sulfur

- 2 As the elements in Period 2 are considered in order from lithium to fluorine, there is an increase in the
 - 1 atomic radius
 - 2 electronegativity
 - 3 number of electron shells
 - 4 number of electrons in the first shell

- 3 Which term is used to describe the attraction that an oxygen atom has for the electrons in a chemical bond?
 - 1 alkalinity
 - 2 electronegativity
 - 3 electron configuration
 - 4 first ionization energy

- 4 Which trend is observed as the first four elements in Group 17 on the Periodic Table are considered in order of increasing atomic number?
 - 1 Electronegativity increases.
 - 2 First ionization energy decreases.
 - 3 The number of valence electrons increases.
 - 4 The number of electron shells decreases.

- 5 Which list of elements is arranged in order of increasing electronegativity?
 - 1 Be, Mg, Ca
 - 2 F, Cl, Br
 - 3 K, Ca, Sc
 - 4 Li, Na, K

- 6 Based on Table S, an atom of which element has the *weakest* attraction for electrons in a chemical bond?
 - 1 polonium
 - 2 sulfur
 - 3 selenium
 - 4 tellurium

- 7 Which general trends in first ionization energy and electronegativity values are demonstrated by Group 15 elements as they are considered in order from top to bottom?
 - 1 The first ionization energy decreases and the electronegativity decreases.
 - 2 The first ionization energy increases and the electronegativity increases.
 - 3 The first ionization energy decreases and the electronegativity increases.
 - 4 The first ionization energy increases and the electronegativity decreases.