Name _____ Date _____ Class _____

HOMEWORK 5-9

VOCABULARY
Define.
1. electron affinity _____

_____

2. a. anion _____

b. The formation of an anion always leads to _____

3. a. cation _____

b. The formation of a cation always leads to _____

4. valence electrons _____

GRAPHIC ORGANIZER
Complete the chart by supplying the missing information.

Element	Group Number	Electron Configuration	Number of Valence Electrons
		$[Ne]3s^1$	
Pb			
Ar			
		$[Kr]5s^2$	
O			
		$[Ne]3s^23p^1$	
I			7

STANDARDIZED TEST PREP
Circle the letter of the best answer.

1. The ability of halogens to easily gain electrons helps explain the halogens'
a. brittleness.
b. high reactivities.
c. low atomic masses.
d. radioactivity.

2. Which statement is true?
a. The total positive charge of the nucleus increases when an electron is added to an atom or ion.
b. Trends for electron affinities are the same within each group of the periodic table.
c. Valence electrons are generally held tightly to the nucleus of an atom.
d. The formation of a cation results in a smaller electron cloud around a nucleus.