Name _____ Date _____ Class _____

Electronegativty

Electronegativty Values
(expressed in Paulings)

H 2.1																	He --
Li 1.0	Be 1.5											B 2.0	C 2.5	N 3.0	O 3.5	F 4.0	Ne --
Na 1.0	Mg 1.2											Al 1.5	Si 1.8	P 2.1	S 2.5	Cl 3.0	Ar --
K 0.9	Ca 1.0											Ga 1.7	Ge 1.9	As 2.1	Se 2.4	Br 2.8	Kr --
Rb 0.9	Sr 1.0											In 1.6	Sn 1.8	Sb 1.9	Te 2.1	I 2.5	Xe --
Cs 0.8	Ba 1.0											Tl 1.6	Pb 1.7	Bi 1.8	Po 1.9	At 2.1	Rn --
Fr 0.8	Ra 1.0																

1. Define electronegativity: _____

_____

_____

_____

_____

2. Referring to the electronegativity values on the diagram above. what is the trend (pattern) for electronegativity moving from the top down to the bottom of a group? Increases…or…Decreases
(circle one)

3. What is the trend for electronegativity moving from left to right across a period? Increases…or…Decreases
(circle one)

4. Why are the Noble Gases not assigned electronegativity values? _____

_____

5. How are polar covalent bonds and nonpolar covalent bonds similar? _____

_____

6. How are polar covalent bonds and nonpolar covalent bonds different? _____

_____

7. How are electronegativity values used to determine what type of bond exists between two elements? _____

_____

8. Complete the table.

Electronegativity Differences	Bond Type

9. How is the order of the elements in a covalent compound determined? List the more…or…less (circle one) electronegative element first, and then list the more…or…less (circle one) electronegative element second.