

## Electronegativity Worksheet

- 1) How are ionic bonds and covalent bonds different?
- 2) How does a polar covalent bond differ from a non-polar covalent bond?
- 3) Fill in the values to complete the following table for predicting bond type based on differences in electronegativity.

<b>0.0--0.5</b>	<b><math>0.5 &lt; x &lt; 2.0</math></b>	<b><math>\geq 2.0</math></b>

- 4) Does electronegativity increase or decrease as you move across a period? Why?
- 5) Does electronegativity increase or decrease as you move down a group? Why??
- 6) For each of the following sets of elements, identify the element expected to be most electronegative (circle it) and which is expected to be the least electronegative (cross out) based on their position in the PT.
  - i) K, Sc, Ca
  - ii) Br, F, Al
  - iii) C, O, N
- 7) Fill in the blanks:

Atom 1	Atom 2	$\Delta E$	Bond Type
<b>P</b>	<b>Si</b>		
<b>Co</b>	<b>Br</b>		
<b>Ge</b>	<b>Se</b>		
<b>Si</b>	<b>F</b>		
<b>K</b>	<b>N</b>		
<b>Cs</b>	<b>O</b>		
<b>As</b>	<b>Cl</b>		
<b>H</b>	<b>P</b>		
<b>Li</b>	<b>Cl</b>		
<b>Fe</b>	<b>C</b>		