

WKS
Bond Polarity

NAME _____
Period _____ Date _____

1. What is electronegativity?
2. What is bond polarity?
3. How is bond polarity determined?
4. What is a non-polar covalent bond? Give two examples of a non-polar covalent bond.
5. What electronegativity difference (ΔEN) indicates a non-polar covalent bond?
6. What is a polar covalent bond? Give two examples of a polar covalent bond.
7. What electronegativity difference (ΔEN) indicates a polar covalent bond?
8. What electronegativity difference (ΔEN) indicates an ionic bond?
9. For the following bonds, use the electronegativity table to indicate ΔEN for each bond (SHOW WORK!) and indicate its polarity. **If the bond is polar covalent, indicate the presence of the dipole using either the arrow or the δ^+/δ^- symbols. If it is ionic, put in the charges.**

(a) N—F $\Delta EN =$ _____ Polarity: _____	(b) N—C $\Delta EN =$ _____ Polarity: _____
(c) O—I $\Delta EN =$ _____ Polarity: _____	(d) P—H $\Delta EN =$ _____ Polarity: _____
(e) K—F $\Delta EN =$ _____ Polarity: _____	(f) O—Si $\Delta EN =$ _____ Polarity: _____
(g) Cl—N $\Delta EN =$ _____ Polarity: _____	(h) O—Mg $\Delta EN =$ _____ Polarity: _____