

Study Guide Chapter 8 - Bonding

What is difference between covalent and ionic bond

What is difference between electron affinity, ionization energy and electronegativity

What is meant by bond length

What is a polar covalent bond

How can you predict the polarity of a covalent bond

What is a dipole moment

What are isoelectronic ions

Predict the relative size of isoelectronic ions

What is a lattice energy

How can you calculate a lattice energy from a series of reactions

What does the equation $Lattice\ E = k(Q_1Q_2/r)$ tell us about various compounds

What is bond energy, a single bond, a double bond a triple bond?

What is the relative energy and bond length of single, double, and triple bonds?

Use bond energies to estimate the ΔH of a reaction

What is the localized electron model electron bonding model?

What is the difference between a lone pair and a bonding pair of electrons?

Be able to draw Lewis structures of any compound

Identify elements that use the octet rule, the duet rule, and elements that can be exceptions to the octet rule

What is resonance?

Be able to draw Lewis structures for molecules that include resonance structures

What is formal charge, how is it used?

Be able to calculate formal charge for any molecule.

What is VSEPR

Use VSEPR to predict the 3D structure of any molecule