

Things to be able to do for Unit 6 Test

Describe how atoms form an ionic bond.

State, in terms of energy, why atoms form ionic bonds.

State the octet rule.

Give a brief description of a lattice structure.

Identify distinctive properties of ionic compounds.

Explain why atoms form ions.

Identify the atoms most likely to form positive ions and the atoms most likely to form negative ions.

Given the symbol of a main group element, indicate the most likely number of electrons the atom will gain or lose.

Predict the charge on ions from the electron affinity, ionization energies, and electron configuration of the atom.

Describe what polyatomic ions are.

Given the formula of a polyatomic ion, name it, and vice versa

Provide the correct formulas for binary ionic compounds.

Provide the correct formulas for compounds containing metals with variable oxidation numbers.

Provide the correct formulas for compounds containing polyatomic ions.

Correctly name binary ionic compounds, compounds containing metals with variable oxidation numbers, and compounds containing polyatomic ions when given the formulas.

Provide chemical formulas for binary ionic compounds, compounds containing metals with variable oxidation

Numbers, and compounds containing polyatomic ions when given the names.

Define: electrostatic attraction, ionic bond, lattice structure, octet rule, polyatomic ion, empirical formula, formula unit