

Ionic Compounds (Pg. 120)

What is the definition of an ionic compound?

What are the two types of ions that make up ionic compounds, and what are they called?

How are ionic bonds formed?

What happens to the electrons of metal atoms and non-metal atoms in the formation of binary ionic compounds?

Why do ions in ionic compounds have full valence shells, and how does this relate to their stability?

Provide the Chemical Composition of These Compounds.

Name: aluminum chloride

Solid Description: _____

Aqueous Description: _____

Formula:

Bohr Diagram:

Name: calcium chloride

Solid Description: _____

Aqueous Description: _____

Formula:

Bohr Diagram:

Name: iron (III) chloride

Solid Description: _____

Aqueous Description: _____

Formula:

Bohr Diagram:

Name: iron (III) oxide

Solid Description: _____

Aqueous Description: _____

Formula:

Bohr Diagram:

Name: copper (II) chloride

Solid Description: _____

Aqueous Description: _____

Formula:

Bohr Diagram:

Name: manganese (IV) oxide

Solid Description: _____

Aqueous Description: _____

Formula:

Bohr Diagram:

Provide the Chemical Composition of These Compounds.

Name: copper (II) oxide

Formula:

Bohr Diagram:

Name: gold (III) chloride

Formula:

Bohr Diagram:

Name: bismuth (V) oxide

Formula:

Bohr Diagram:

Name: tin (IV) chloride

Formula:

Bohr Diagram:

Name: polonium (IV) oxide

Formula:

Bohr Diagram:

Name: mercury (II) oxide

Formula:

Bohr Diagram:

Chemical Bonds and Energy (Pg. 124)

What needs to happen to chemical bonds in a chemical reaction before atoms can be rearranged?

How are changes in energy related to chemical reactions?

How are chemical bonds defined in the text?

What factor determines the amount of energy required to break a chemical bond?

What happens to energy when a chemical bond forms, and what does this mean for the stability of atoms?