

Name _____ Date _____ Period _____

Atoms and Bonding *Review and Reinforce*

Ionic Bonds

Understanding Main Ideas

Use the chart to answer questions 1-4 in the spaces provided.

Ions and Their Charges		
Name	Charge	Symbol/Formula
Ammonium	1+	NH_4^+
Potassium	1+	K^+
Calcium	2+	Ca^{2+}
Iron	3+	Fe^{3+}
Chloride	1-	Cl^-
Oxide	2-	O^{2-}
Sulfide	2-	S^{2-}
Phosphate	3-	PO_4^{3-}

- How many ammonium ions are needed to balance the charge of one sulfide ion? _____
- Write the formula for the following compounds:
calcium chloride _____
potassium phosphate _____
iron oxide _____
- Name the following compounds:
CaS _____
 NH_4Cl _____
 K_2O _____
- Which ions in the table are polyatomic ions? _____

From the list below, choose the term that best completes each sentence.

ionic bond ion gaining
losing crystal chemical formula
polyatomic ion

- An ion that is made of more than one atom is called a(n) _____.
- An atom becomes a negative ion by _____ an electron.
- A(n) _____ is an atom or group of atoms that has an electric charge.
- A _____ is an orderly, three-dimensional arrangement of ions or atoms in a solid.
- A combination of symbols that shows the ratio of elements in a compound is called a(n) _____.
- An atom becomes a positive ion by _____ an electron.
- When a(n) _____ forms, the ions come together in a way that balances out the charges on the ions.