

Block 065: **Reflections on Ionic Naming**

NAME: _____

Answer the following questions.

1. With short answers, relate these terms to the periodic table:

Group

Period

Representative Element

Transition Element

2. Define the terms *cation* and *anion* and show how they are related to the terms *metal* and *nonmetal*.

3. Use the periodic table to determine the charge on the following ions:

Magnesium ion = $2+$	Oxide ion = $2-$	Fluoride ion = ___	Lithium ion = ___
Sodium ion = ___	Aluminum ion = ___	Sulfide ion = ___	Cesium ion = ___

4. Distinguish between a polyatomic ion and a monatomic ion.

5. Circle the choice that makes the following statements true.

Elements that are nonlustrous and are poor conductors of electricity are called (*metals/nonmetals*).

The Group B elements are known as the (*representative/transition*) elements.

A (*cation/anion*) is any atom or group of atoms with a positive charge.

The metals in Groups 1A, 2A, and 3A (*gain/lose*) electrons when they form ions.

The one common polyatomic ion that is positively charged is the (*ammonium/ammonia*) ion.

The formula for the hydrogen carbonate ion is (CO_3^{2-}/HCO_3^{1-}).

6. Write the names of the following compounds.

$NaC_2H_3O_2$ _____	$Ca_3(PO_4)_2$ _____
$Al_2(CrO_4)_3$ _____	$KBrO_3$ _____
$Cu(IO_3)_2$ _____	$Pb(HSO_4)_4$ _____
MgO _____	$Pb(ClO_4)_2$ _____
$Fe(MnO_4)_2$ _____	$CuOH$ _____
$Au_2(C_2O_4)_3$ _____	$Mg(CN)_2$ _____

7. Write formulas for the following compounds.

lead (IV) acetate _____	gold (I) bicarbonate _____
francium hydroxide _____	aluminum dichromate _____
iron (III) chromate _____	lead (II) hypochlorite _____
copper (I) bromate _____	strontium nitrite _____
potassium phosphate _____	cobalt (II) sulfate _____
silver sulfate _____	magnesium cyanide _____