

Chem 151 Drilling Question Set #1
Naming of Inorganic Compounds and Balancing Simple Reaction Equations

1. Write the chemical formula for each of the following compounds. Circle the names of all the polyatomic ions.

Silicon dioxide

Ammonium carbonate

Calcium iodide

Lanthanum(III) sulfide

Dinitrogen trioxide

Cesium sulfate

2. Give the systematic name for each of the following compounds. Circle all the compounds with high ionic characters (that is, they are named as ionic compounds).

CuS

Cl₂O₇

Na₂O₂

SeF₆

Fe(HCO₃)₂

3. For each of the following inorganic acids, give a systematic name to the anion, then, name the acid.

H₃PO₄

HBrO₃

HBrO₄

HNO₂

H₂SO₃

HI (aq)

HCN (aq)

Guess what... (Without looking up your notes for an answer, based on what you have learned to make an educational guess, then, answer the question below.)

4. Knowing that a phosphate ion is PO₄³⁻, what is the formula of an arsenate ion? What is the formula of an arsenite ion?

5. Balance the following reaction equations:

