Worksheet #3.

'ate' 'ite'

1. Sodium chromate

Na^{+} CrO_4^{2-}

Na_2CrO_4

2. Ca^{2+} CO_3^{2-}

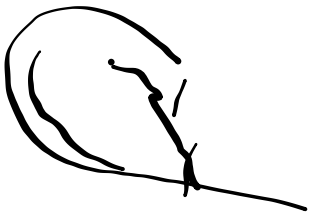
$CaCO_3$

4-6

11-14

3. Mg^{2+} NO_3^{-}

$Mg(NO_3)_2$



4. Al^{3+} SO_4^{2-}

$Al_2(SO_4)_3$

5. Li^{+} PO_4^{3-}

Li_3PO_4

6. NH_4^{+} Cl^{-} NH_4Cl

11. KCH_3CO_2 CH_3COO^-

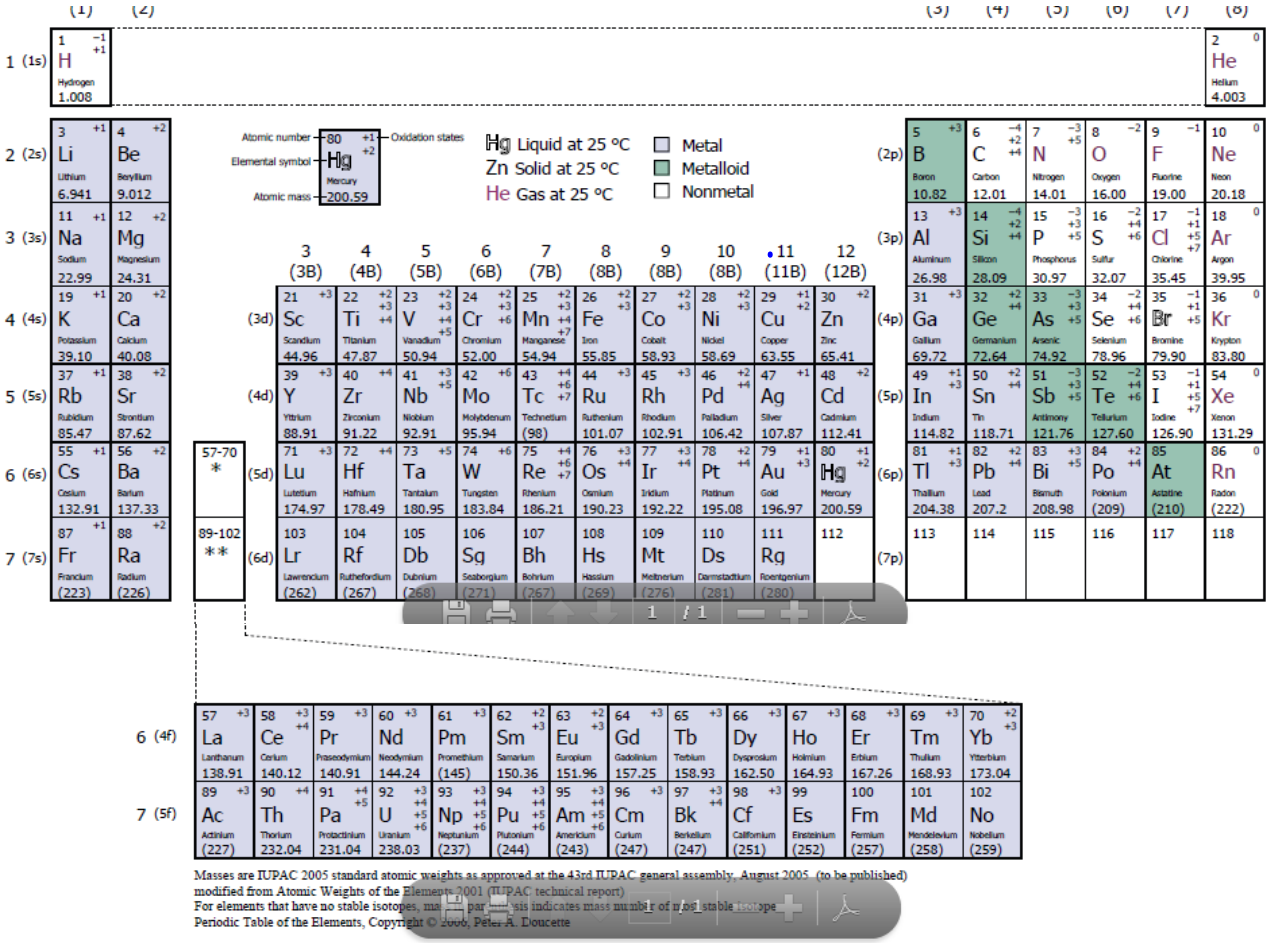
potassium acetate

12. $Mg_3(PO_4)_2$ magnesium phosphate

13. $Al(ClO_3)_3$ Aluminum chlorate

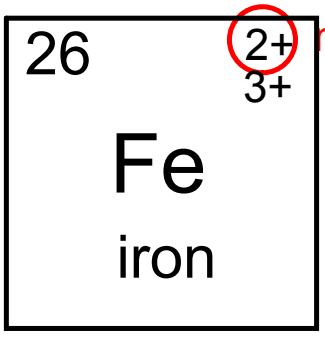
14. $CaSO_4$

Calcium Sulfate


Atomic number
Elemental symbol
Atomic mass
Oxidation states
Hg Liquid at 25 °C
Zn Solid at 25 °C
He Gas at 25 °C
Metal
Metalloid
Nonmetal
57-70 *
89-102 **
Masses are IUPAC 2005 standard atomic weights as approved at the 43rd IUPAC general assembly, August 2005. (to be published)
modified from Atomic Weights of the Elements 2001 (IUPAC technical report)
For elements that have no stable isotopes, ma par sis indicates mass number of mo stable isotope
Periodic Table of the Elements, Copyright © 2006, Peter A. Doucette

Multivalent Metals and Their Ions

Transition elements are located in the middle of the periodic table. Many of them have more than one ionic charge. These elements are called multivalent metals.



most common ion

When naming the ions of multivalent metals, you must include a roman numeral. The roman numeral is equal to the charge on the ion.

I II III IV V VI VII VIII IX X

Fe^{2+} = iron (II) ion

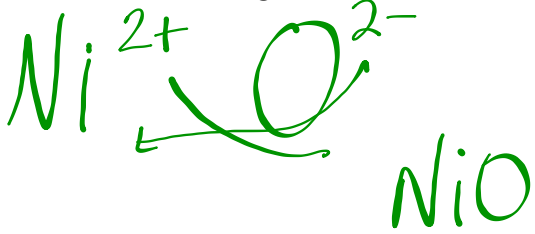
Pb^{4+} = lead (IV) ion

Cr^{3+} = chromium (III) ion

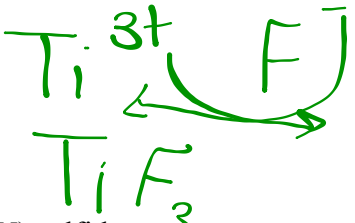
Ionic Compounds Involving Multivalent Metals

Write chemical formulas for the following:

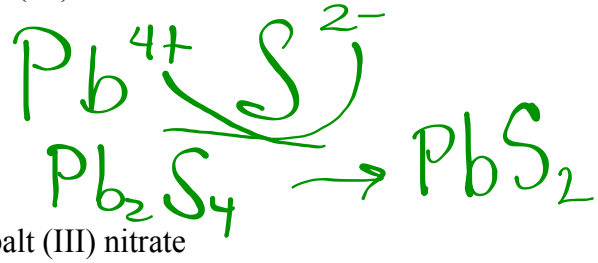
1. nickel (II) oxide



2. titanium (III) fluoride



3. lead (IV) sulfide



4. cobalt (III) nitrate

5. manganese (III) sulfate

Attachments

Science 10 - Grade 9 Chem Topics.docx

Science 10 - Grade 9 Chem - What Do You Know.docx

Science 10 - Activity - Molecular Models.docx

Science 10 - Answer Key - Ions and Subatomic Particles.pdf