

6.3 Worksheet (It's a BIG one ☺)

6.3 wkst (1)

Name _____

1. Write the chemical formula for the following.

- a. Sodium chloride _____
- b. Magnesium sulfide _____
- c. Potassium oxide _____
- d. Calcium oxide _____
- e. Lithium sulfide _____
- f. Beryllium phosphide _____
- g. Sodium nitride _____
- h. Aluminum sulfide _____
- i. Lithium nitride _____
- j. Magnesium nitride _____
- k. Copper (II) sulfide _____
- l. Copper (II) chloride _____
- m. Copper (III) sulfide _____
- n. Iron (II) phosphide _____
- o. Iron (III) phosphide _____
- p. Lead (IV) chloride _____
- q. Lead (IV) oxide _____
- r. Lead (II) oxide _____
- s. Chromium (II) Oxide _____
- t. Chromium (III) Iodide _____

2. Write the formula name for the following.

- a. NaCl _____
- b. KCl _____
- c. CaCl_2 _____
- d. CaO _____
- e. Mg_3N_2 _____
- f. CaS _____
- g. CuO _____
- h. Cu_2O_3 _____
- i. PbO _____
- j. PbO_2 _____
- k. FeCl_2 _____
- l. Na_2S _____
- m. CuF_2 _____
- n. Pb_3N_4 _____

STOP

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6.3 wkst (2)

1. Write the chemical formula for the following under the chemical name.

- Sodium hydroxide
- Sodium carbonate
- Potassium hydroxide
- Ammonium chloride
- Aluminum acetate
- Copper (II) hydroxide
- Copper (III) acetate
- Lead (IV) carbonate
- Iron (III) phosphate
- Iron (II) chlorate
- Copper (III) carbonate
- Ammonium chlorate
- Ammonium sulfate
- Lithium nitrate

2. Write the chemical name for the following under the chemical formula.

- Li_2SO_4
- $\text{CaC}_2\text{H}_3\text{O}_2$
- $\text{Ca}(\text{OH})_2$
- $\text{Ca}_3(\text{PO}_4)_2$
- $\text{Cu}(\text{OH})_2$
- CuSO_4
- $\text{Cu}_2(\text{SO}_4)_3$
- FeSO_4
- $\text{Fe}(\text{C}_2\text{H}_3\text{O}_2)_3$
- NH_4OH
- $(\text{NH}_4)_2\text{O}$
- $(\text{NH}_4)_2\text{SO}_4$
- FePO_4
- LiNO_3

STOP

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6.3 wkst (3)

Name _____

1. Write the chemical formula for the following under the chemical name.

- Carbon dioxide
- Carbon trioxide
- Carbon tetroxide
- Dicarbon trioxide
- Disulfur heptachloride
- Sulfur monoxide
- Nitrogen pentafluoride
- Carbon octabromide
- Hexacarbon heptabromide
- Carbon monoxide

2. Write the chemical name for the following under the chemical formula.

- NO
- SO
- SO₃
- C₃O₄
- C₄F
- S₃O₅
- PO
- P₃Br₂
- P₈O₃

Write the chemical formula for the following and determine the empirical formula (if it is not the formula you figured out)

- 12.01 g C, 32 g O
- 32.07 g S, 48 g O
- 2.02 g H, 32 g O

Write the chemical formula for the following and determine the empirical formula (if it is not the formula you figured out)

- 28.02 g N, 114 g F
- 31 g P, 64 g O
- 204.17 g C, 20.20 g H, 56.04 g N, 23 g Na, 144 g O, 31 g P

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The following is for additional practice

Name the following compounds

AlF_3 _____

$\text{Ba}(\text{CN})_2$ _____

BeF_2 _____

BeO _____

CBr_4 _____

CO _____

CuO _____

FeO _____

KClO_2 _____

KClO_3 _____

KNO_2 _____

LiF _____

MgO _____

MgSO_4 _____

N_2O_3 _____

Na_2O _____

NaBr _____

NaF _____

NF_3 _____

Ni_2O_3 _____

TiO_2 _____

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Write the ions for the following

Carbonate _____

Phosphite _____

Fluoride _____

Iron (II) _____

Phosphate _____

Copper (I) _____

Titanium (III) _____

Beryllium _____

Aluminum _____

Name the following ions

Ca^{+2} _____

Cl^- _____

HCO_3 _____

Cu^{+2} _____

N^{-3} _____

Na _____

O _____

Sr _____

Cr^{+2} _____

NO_2 _____

SO_3 _____

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Write the chemical formula for the following

Copper(II) oxide _____

Sodium Nitride _____

Magnesium Chloride _____

Carbon tetrachloride _____

Dinitrogen tetroxide _____

Potassium sulfate _____

Barium fluoride _____

Calcium acetate _____

Rubidium sulfate _____

Sodium nitrite _____

Silver (III) oxide _____

Cadmium (I) oxide _____

Cobalt (III) hydroxide _____

Magnesium chloride _____

Barium sulfide _____

Lithium oxide _____

Is the following an empirical or molecular formula?

H₂O _____

H₂O₂ _____

C₃H₆ _____

Sr₂O₂ _____

Is the following an empirical or molecular formula?

C₆H₁₂O₆ _____

C₆H₂₇O₁₈ _____

CO _____

CO₂ _____

6.3 Worksheet (It's a BIG one ☺)

Complete the following using the following terms.

High, ion, water, covalent, molecule, ionic, low, salt

Type of Bond		
Basic Unit		
Melting Point		
Example		