Name: Date: Period:

Formulas and Covalent Bonds Homework

Correctly fill in the box below.

METALS _____ electrons and carry a _____ charge. (Group ___ is the most willing to lose electrons)
NONMETALS _____ electrons and carry a _____ charge. (Group ___ is the most willing to gain electrons)

Write the correct formula for the compounds that each of the following pairs of ions will make.

H^+ F^- _____ NH_4^+ O^{-2} _____

Mg^{+2} Cl^- _____ Cu^{+2} I^- _____

Ba^{+2} CN^- _____ Ca^{+2} NO_3^- _____

NH_4^+ Cl^- _____ Sr^{+2} F^- _____

Mg^{+2} O^{-2} _____ Fe^{+2} Br^- _____

Ca^{+2} OH^- _____ Ba^{+2} NO_3^- _____

Al^{+3} SO_4^{-2} _____ Cr^{+3} O^{-2} _____

Fe^{+3} O^{-2}_____ Al^{+3} NO_3^- _____

Ionic bonds are always formed between a _____ and a _____.

Covalent bonds are ONLY formed between _____.

Decide whether the following compounds contain ionic (I) or covalent (C) bonds:

HgO____ CCl_4 _____ NaCl _____

AgI _____ SiO_2_____ CO_____

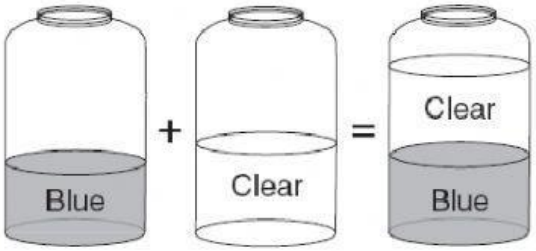
HgO____ CCl_4 _____ NaCl _____

LIVEWORKSHEETS

Complete each set of blanks with the appropriate vocabulary word.

When electrons are NOT shared equally, the molecule is _____.
Water is an example of a _____ molecule.

When electrons are shared equally, the molecule is _____.
Oil is an example of a _____ molecule.



After 25 minutes

Explain why the two liquids in the picture are not mixing. _____
_____
_____
_____

Finish this sentence:
A molecule is _____
_____

He^{2}
Ne^{10}
Ar^{18}
Kr^{36}
Xe^{54}
Rn^{86}

Important Fact: GROUP 18 is known as the _____ _____. They do not gain, lose or share their electrons. They do NOT _____ with other elements. You will NOT see them making compounds with other elements.

LIVEWORKSHEETS