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 _____

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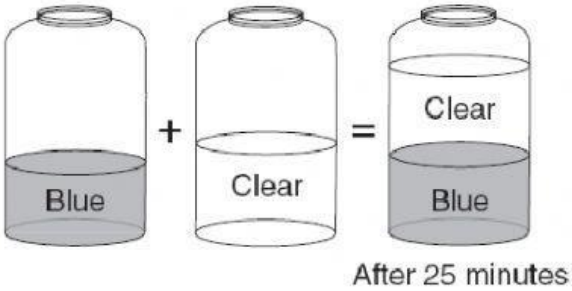
Complete each set of blanks with the appropriate vocabulary word.

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.



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