

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)

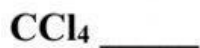
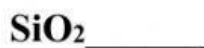
Write the correct formula for the compounds that each of the following pairs of ions will make.



Ionic bonds are always formed between a \_\_\_\_\_ and a \_\_\_\_\_.

Covalent bonds are ONLY formed between \_\_\_\_\_.

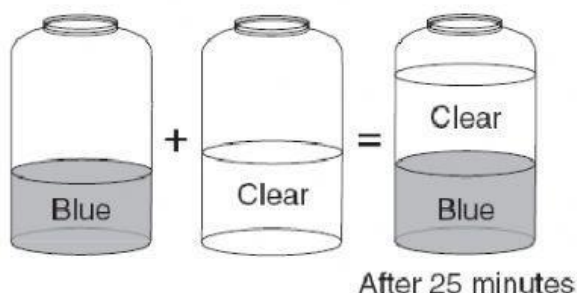
Decide whether the following compounds contain ionic (I) or covalent (C) bonds:



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.