

Practice Test Chemical Bonds and Compounds

1. What makes a compound different from an element?
2. What makes a compound different from a mixture?
3. What makes solutions different from other mixtures?
- 4 – 8 match the items on the right with the descriptions on the left
4. only forms positive ions
5. has a high melting point and conducts electricity when melted
6. never forms compounds
7. forms when pairs of electrons are shared by two atoms
8. forms when electrons are transferred between atoms
9. Which **two** of the following are written correctly? Fe<sub>2</sub> O<sub>2</sub> He<sub>2</sub> F Ca
10. For each pair of elements below, use the “stairs” on the periodic table to determine the type of compound that will form. Write “C” for covalent, “I” for ionic, and “N” for none.  
Al & O \_\_\_\_\_ F & Ne \_\_\_\_\_ Ni & Cr \_\_\_\_\_ N & I \_\_\_\_\_  
C & Cl \_\_\_\_\_ Pb & S \_\_\_\_\_ Ar & S \_\_\_\_\_ Na & P \_\_\_\_\_
11. Write the **name** of each of the following compounds. Be sure to use different naming rules for ionic and covalent compounds  
Na<sub>2</sub>O \_\_\_\_\_ N<sub>2</sub>O<sub>6</sub> \_\_\_\_\_  
Pb(OH)<sub>2</sub> \_\_\_\_\_ (NH<sub>4</sub>)<sub>2</sub>S \_\_\_\_\_  
SiO<sub>2</sub> \_\_\_\_\_ FeSO<sub>4</sub> \_\_\_\_\_
12. Write the **chemical formula** for each of the following compounds  
Copper (I) Phosphate      DiPhosphorus Pentoxide      Magnesium Fluoride  
Chromium (VI) Chlorite      Iron (III) Oxide      Nitrogen Tribromide