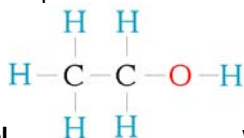


Topic 6 - Chemical Compounds

- When any of the 112 elements combine into groups of 2 or more they form compounds. If atoms of elements are shared, this type of compound is formed.
 - ionic
 - atomic
 - aqueous
 - molecular
- The chemical formula uses symbols and numerals to identify which elements and how many atoms of each element are present in the compound.



The chemical formula for **ethanol** would be written as ...

- C_2H_6O
 - H_3CH_2COH
 - C_23H_2O
 - $H_2HC_2OH H_2$
- Guyton de Morveau in France developed a standardized chemical naming system in 1787 to determine a chemical name. The type of element that is always first is the ...
 - acid
 - base
 - metal
 - Non-metal
 - If a compound is formed and it contains a metal the compound is.
 - ionic
 - acidic
 - basic
 - molecular
 - The only compound that contains three elements is ...
 - $H_2O_{(l)}$ **Water**
 - $C_6H_{12}O_{6(s)}$ **Glucose**
 - $CO_{2(g)}$ **Carbon dioxide**
 - $NO_{2(g)}$ **Nitrogen dioxide**
 - Substances dissolved in water use a symbol following the chemical formula to identify it as a water-based solution ...
 - liquefied
 - dissolved
 - distilled
 - aqueous
 - A molecule is the smallest independent unit of a pure substance. **Diatomic** molecules are molecules made up of.
 - 2 atoms of the same element
 - more than 2 atoms of an element
 - 1 atom from 2 different elements
 - 2 atoms from 2 different elements
 - In molecular pure substances the bonding between atoms is strong, but the attraction between the molecules is weak. They are good insulators, poor conductors and have a distinct crystal shape. This type of molecular compound is produced when ...
 - metals combine
 - non-metals* combine
 - gases and solids combine
 - non-metals and metals combine

9. Some molecular compounds are better known by their common names rather than their chemical names, example: water H_2O is actually
- hydroxide
 - dihydroxide
 - hydrogen dioxide
 - dihydrogen oxide
10. When dissolved in water, the metal (**Na**) loses an electron and the nonmetal (**Cl₂**) gains an electron forming an aqueous solution of ions like these ...
- (Na)⁺ (Cl₂)⁺
 - (Na)⁻ (Cl₂)⁺
 - (Na)⁺ (Cl₂)⁻
 - (Na)⁻ (Cl₂)⁻
11. Some ions can also form when certain atoms of elements combine. These ions are called **polyatomic** ions (*poly* meaning "*many*"). Polyatomic atoms are a group of atoms acting as one. The compound that contains a polyatomic ion is ...
- $\text{H}_2\text{O}_{(l)}$
 - $\text{NaCl}_{(s)}$
 - $\text{C}_6\text{H}_{12}\text{O}_{6(s)}$
 - $\text{CaCO}_{3(s)}$
12. Some compounds of copper such as Copper II Sulfate used use a roman numeral in its chemical name. **Cu(II)SO₄** The roman numeral is used to show ...
- which ion is used
 - how the ion is used
 - the order of ions used
 - how many ions are used
13. A compound made from two elements is called a.
- dual compound
 - binary compound
 - double compound
 - secondary compound
14. Generally when looking at patterns in the periodic table this can be said about elements in a group ...
- They all have the same density
 - They react very violently
 - They all have the same ion charge
 - They all have different ion charges
- 15.

# of Atoms	Prefix
1	mono
2	di
3	tri
4	tetra
5	penta

The formula for carbon tetrachloride is ...

- C_4Cl
- CCl_4
- C_4Cl_4
- Cl_4C