

# BUILDING MOLECULES

**Purpose:**

Name: \_\_\_\_\_

In this activity you will use molecule kits to show how various atoms are held together by chemical bonds to create molecules.

If a molecule is made of only one type of atom, it is called an \_\_\_\_\_.

If a molecule is made up of two or more different kinds of atoms it is called a \_\_\_\_\_

## Molecule Kit Legend

Atom	Colour	Bonding Capacity
Hydrogen		
Oxygen, Calcium, Magnesium		
Carbon		
All Halogens (Cl, Br, I, F)		
Nitrogen		

Building Molecules

<b>Molecular Formula and Name</b>	<b>Number and Type of Each Atom</b>	<b>Structural Formula</b>	<b>Element or Compound</b>
Magnesium Chloride  $MgCl_2$			
Ammonia  $NH_3$			
Hydrogen Gas  $H_2$			
Oxygen Gas  $O_2$			

Hydrogen Peroxide  H <sub>2</sub> O <sub>2</sub>			
Methane  CH <sub>4</sub>			
Water  H <sub>2</sub> O			
Carbon Dioxide  CO <sub>2</sub>			
Methanol  CH <sub>3</sub> OH			

Acetylene Gas  $C_2H_2$			
Bromine  $Br_2$			
Nitrogen Gas  $N_2$			
$H_3CCOOH$ Acetic acid (vinegar)			
Hydrogen Cyanide  $HCN$			
Formaldehyde  $CH_2O$			