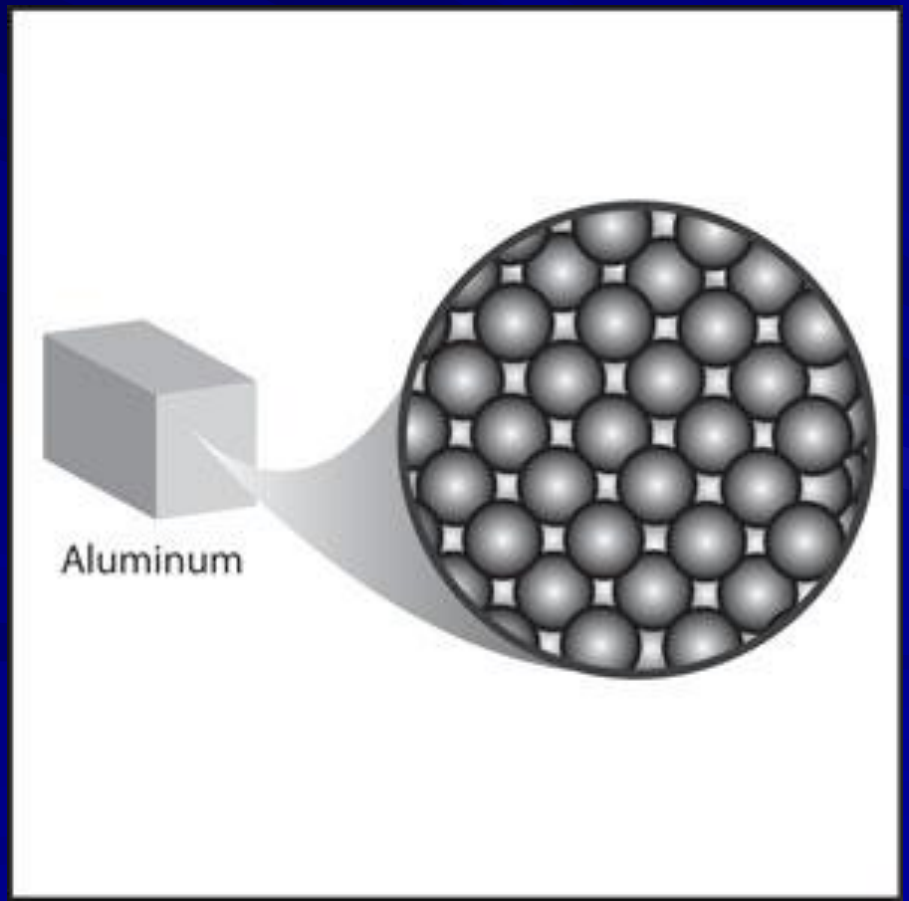
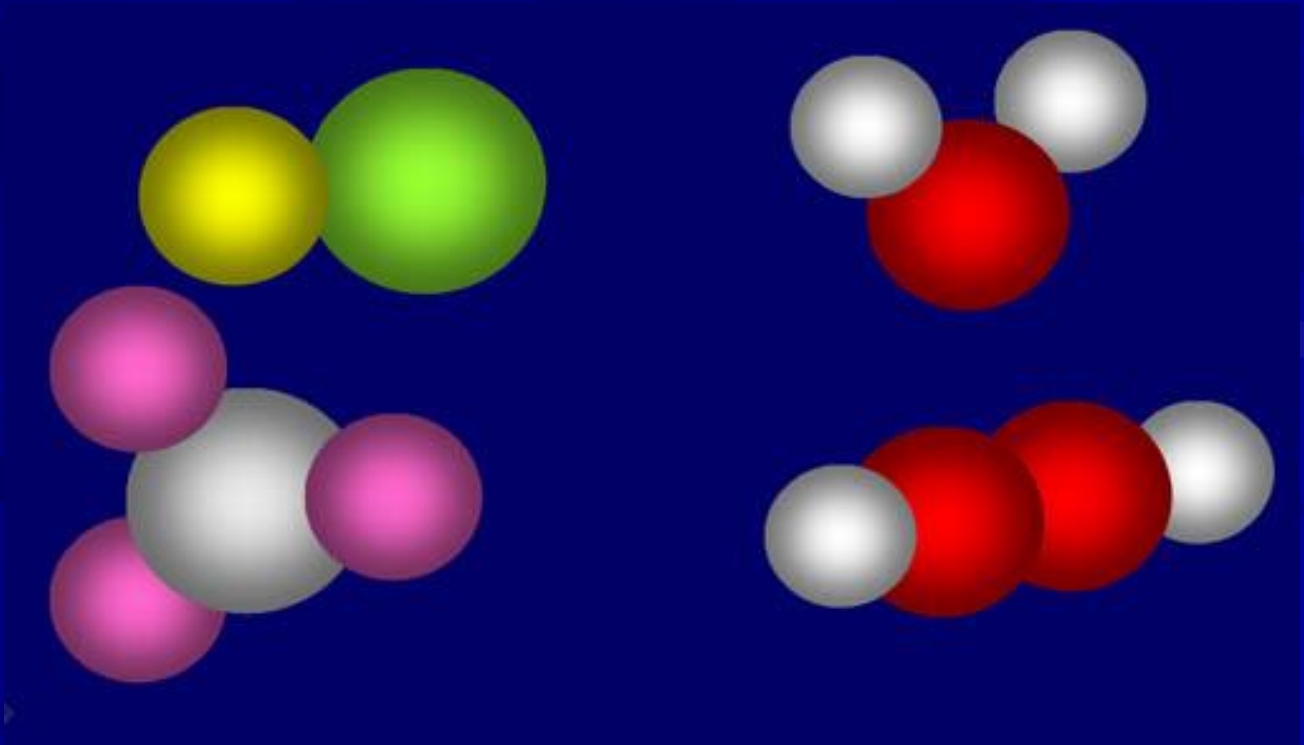
ATOMS AND MOLECULES

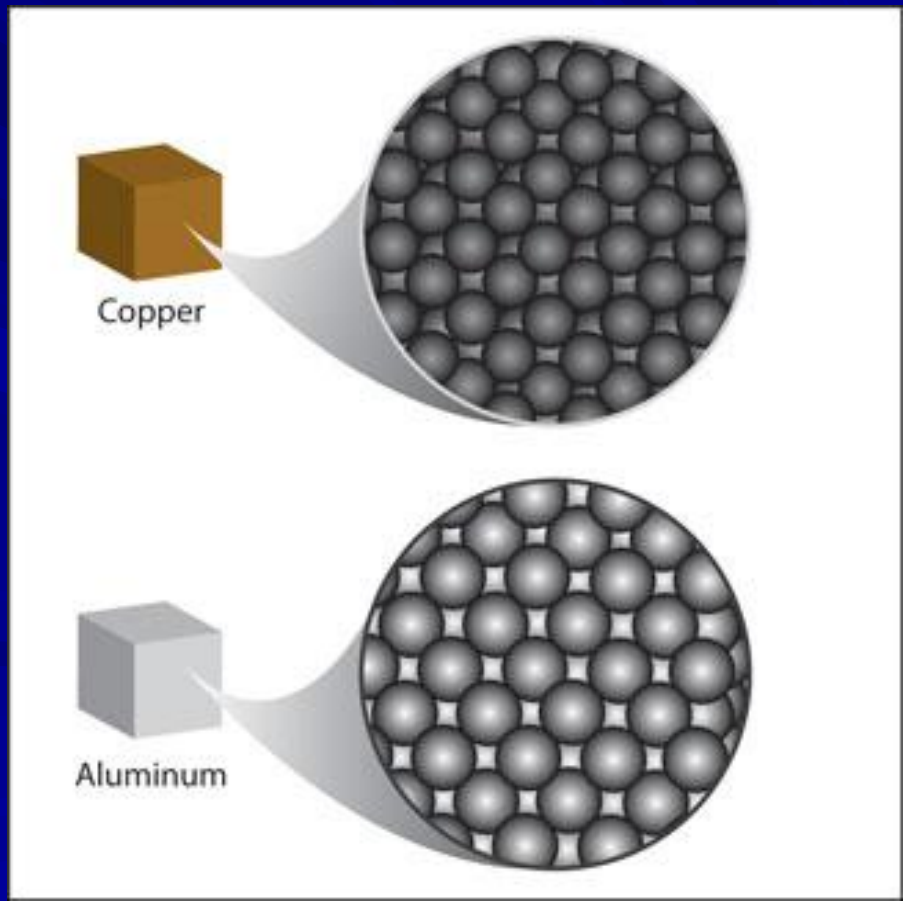


WHAT IS AN ATOM?

- All the material on the Earth is composed of various combinations of atoms;

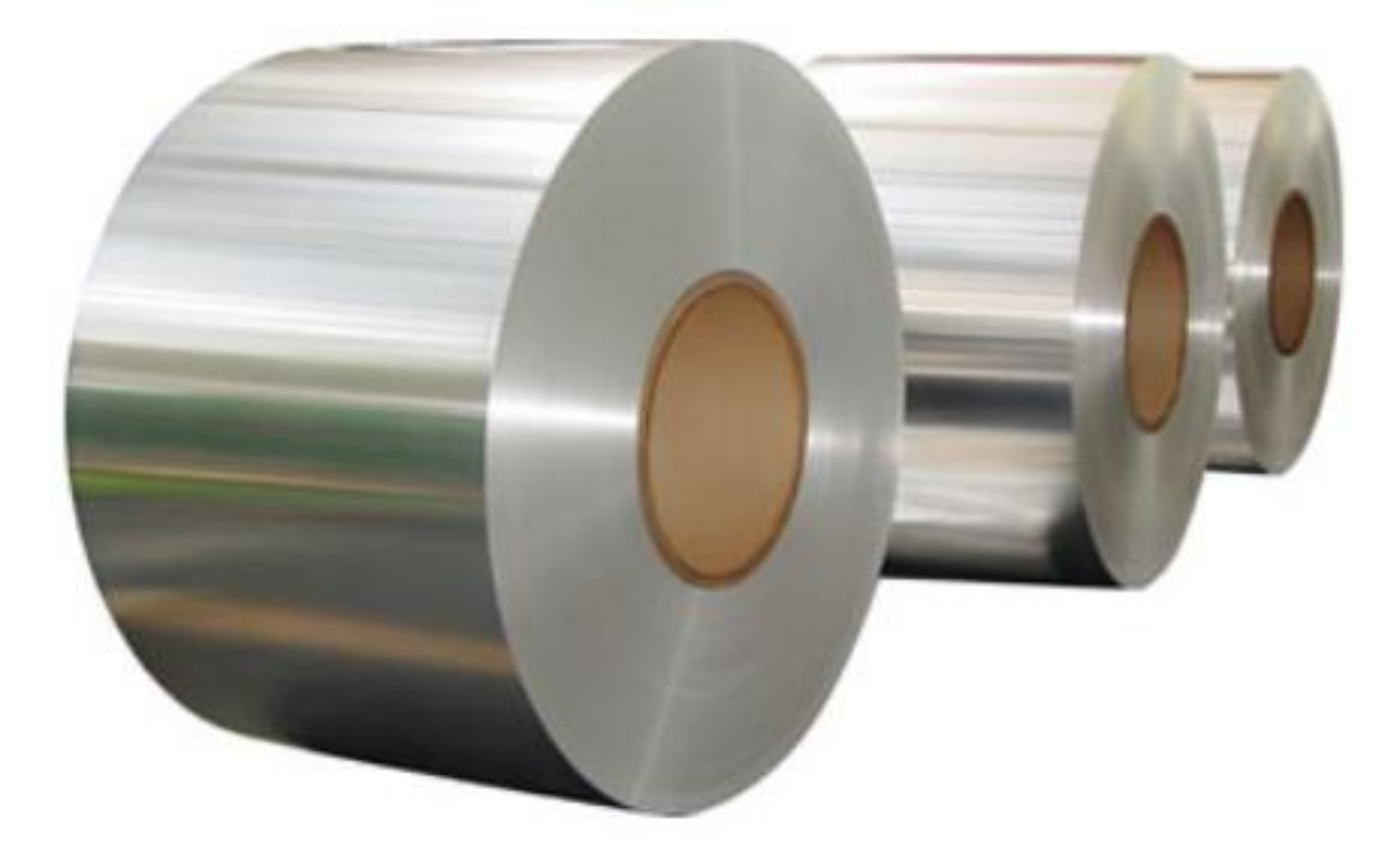


- ATOM is the smallest unit of matter that retains the identity of the substance;

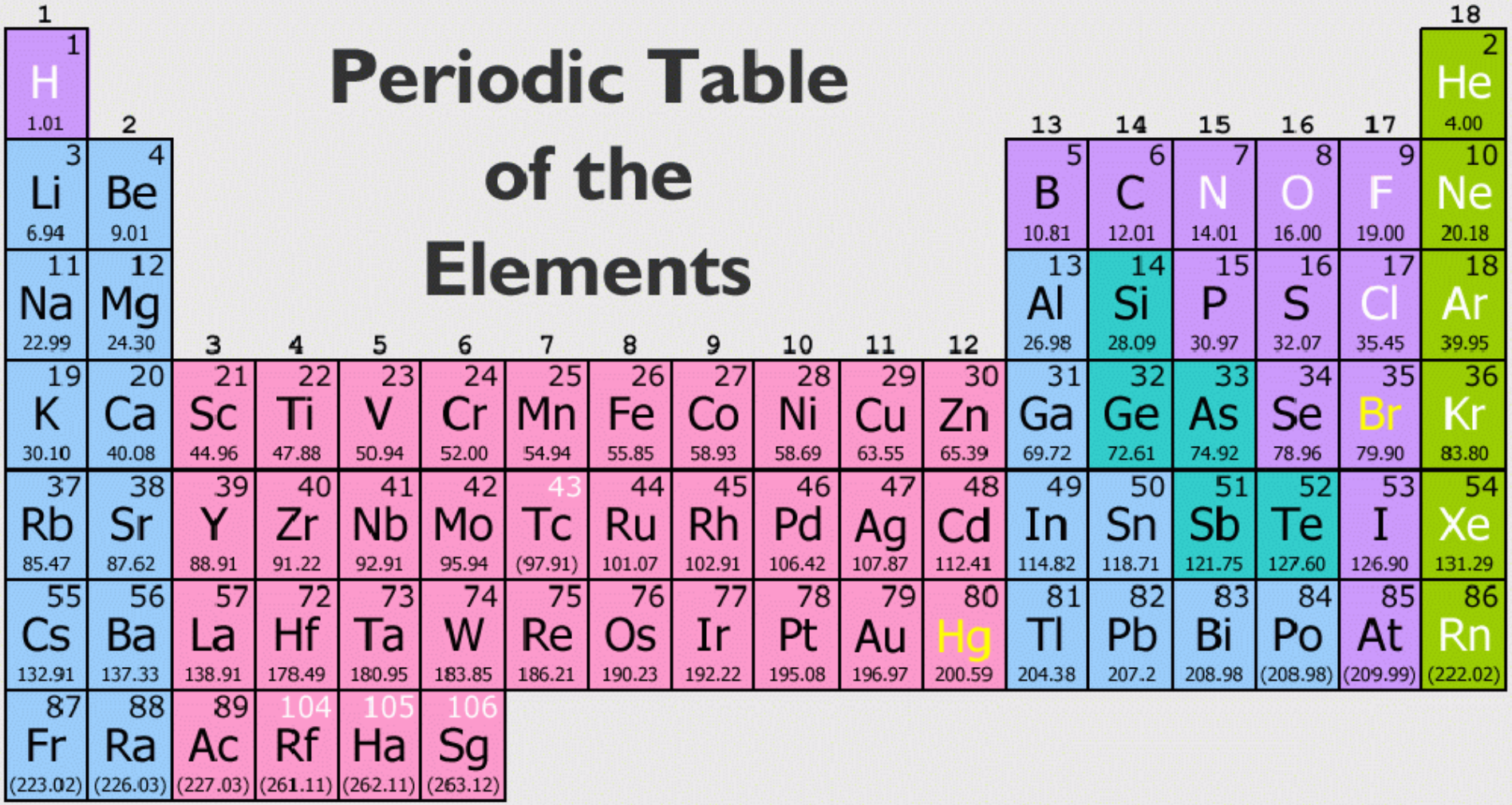


- Atoms differ in size and mass.

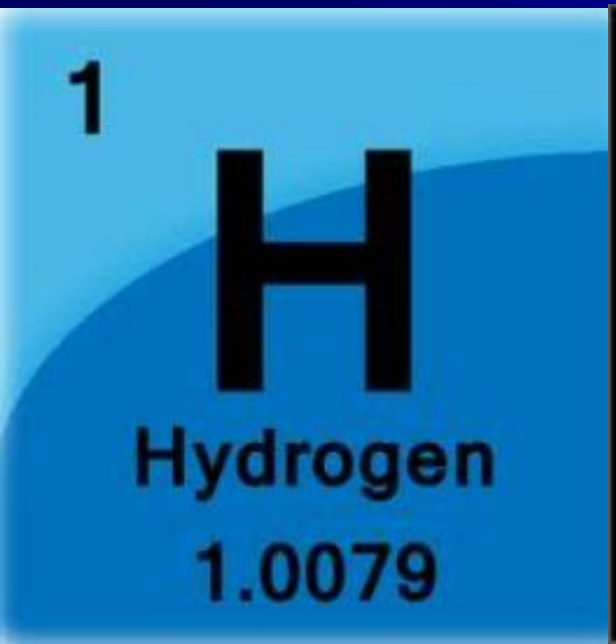
- A substance that contains only one type of atoms is called an ELEMENT.

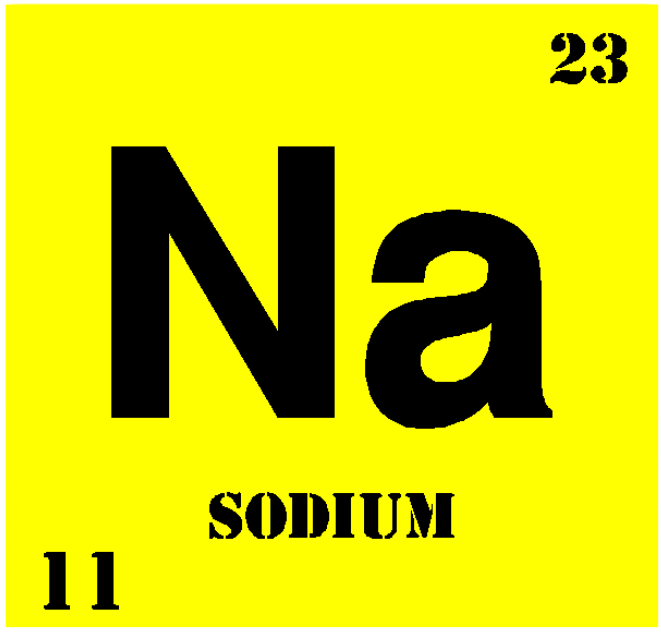


- All elements are listed in the ***periodic table*** in increasing order of their atomic number.



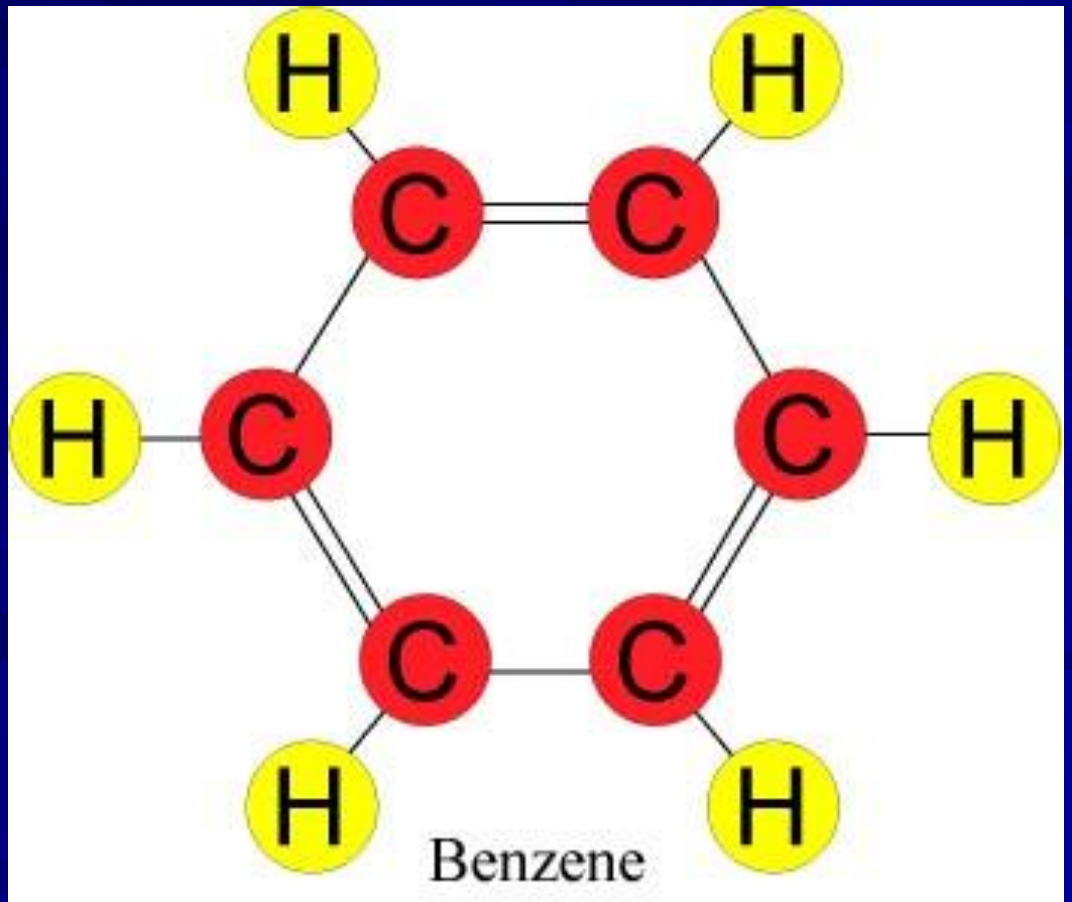
- Elements are given a ***name*** and a ***chemical symbol. For example,***
- Hydrogen – ***H***
- Helium – *He*
- Sodium –***Na***





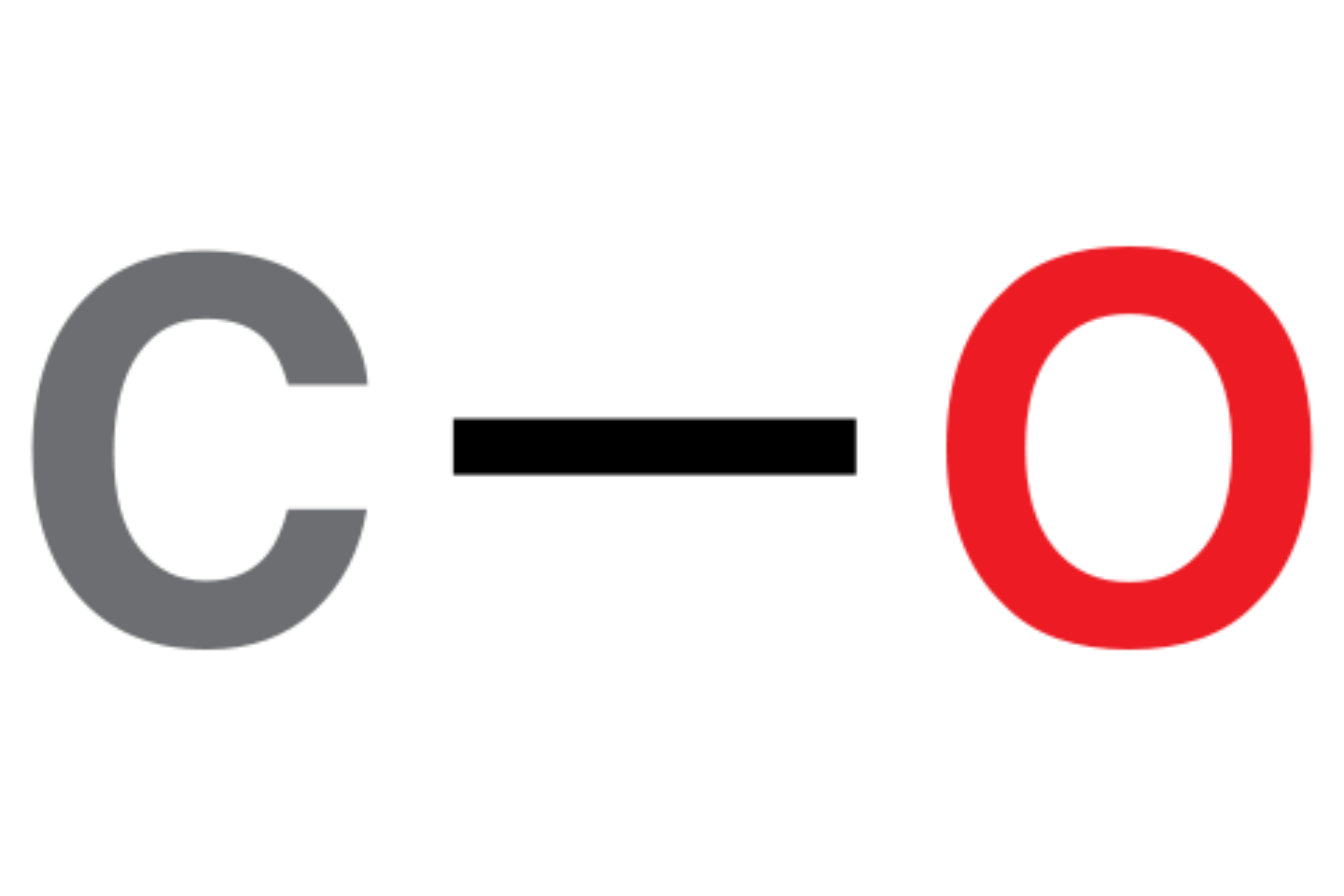
MOLECULES

- A ***molecule*** is a group of two or more atoms held together by chemical bonds;

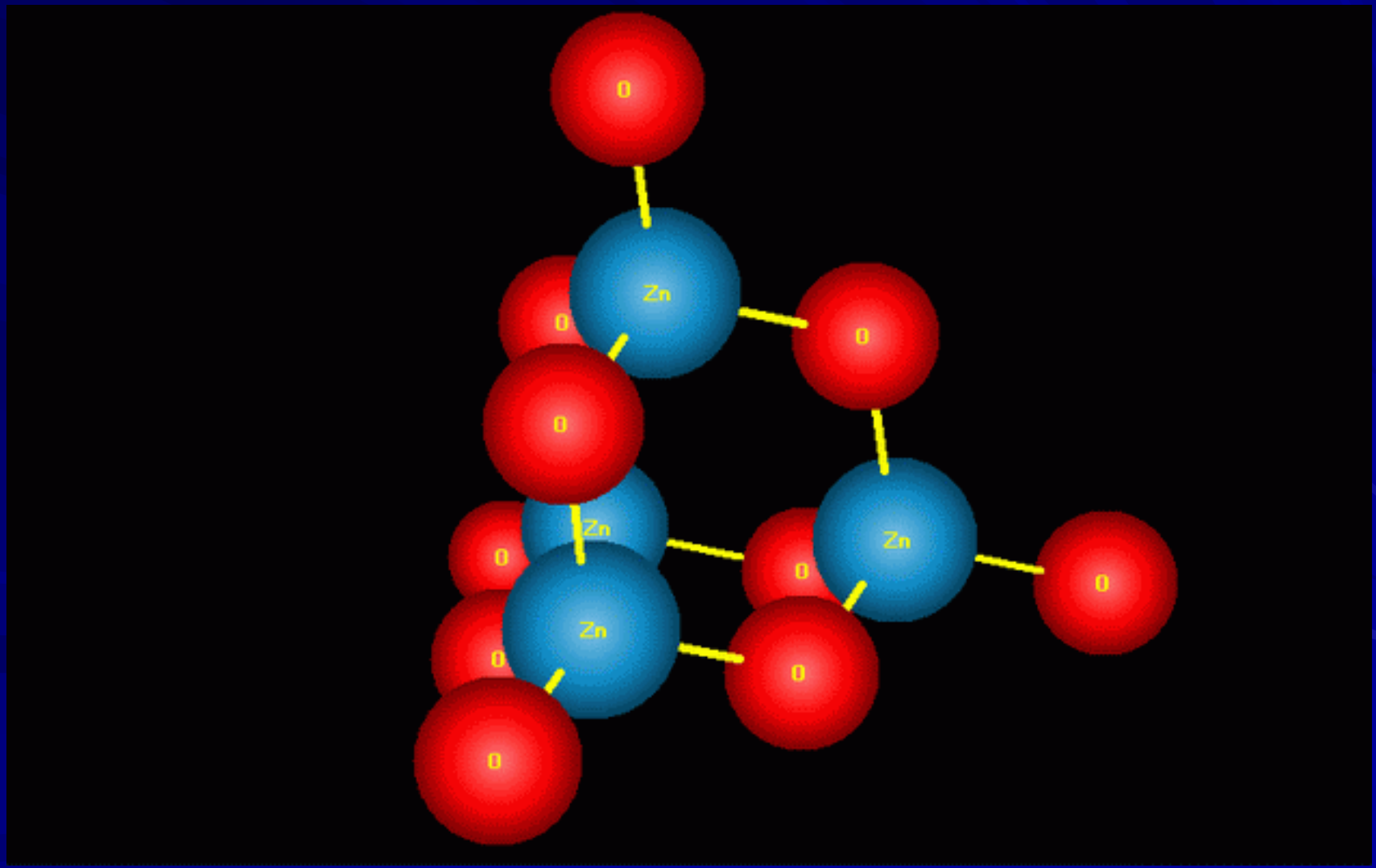


Benzene

- A COMPOUND is a pure substance that contains at least two types of atoms that are chemically bound;

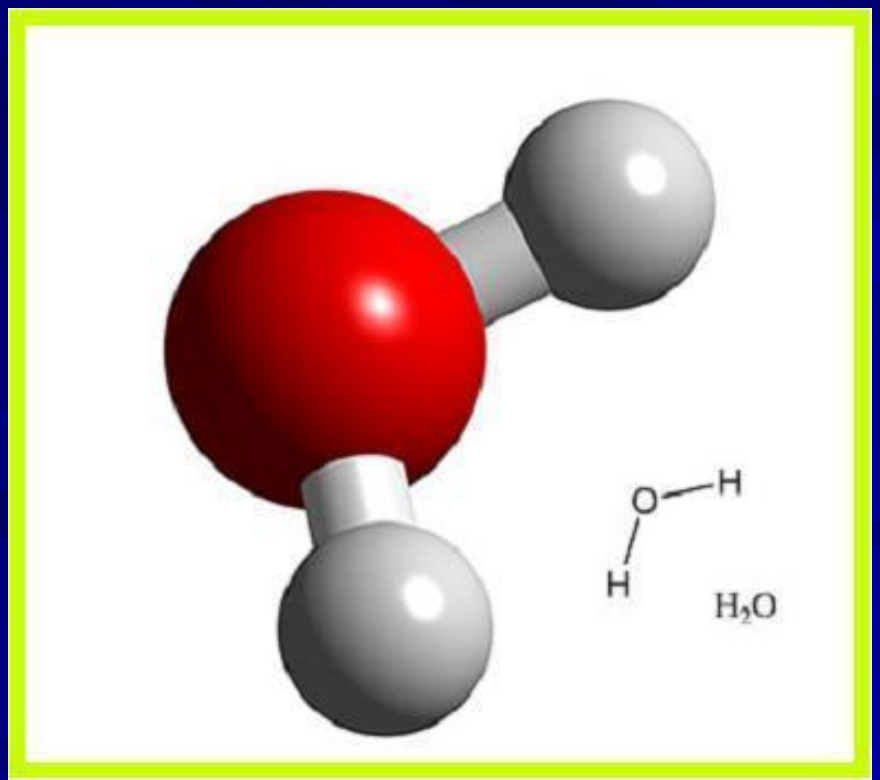


- Atoms form molecules in order to be ***chemically stable.***



- Molecules are given a ***name*** and a ***chemical formula***
- ***For example,***

1. Dihydrogen monoxide (water) - H_2O



2. Carbon dioxide - CO_2
3. Nitrogen trihydride (ammonia) - NH_3