

### Chemical Bonding Worksheet

Ionic Bond  
Covalent Bond  
Metallic Bond

between a Metal and Non-Metal  
between a Non-Metal and Non-Metal  
between a Metal and Metal

(M + NM)  
(NM + NM)  
(M+ M)

Determine if the elements in the following compounds are metals or non-metals. Describe the type of bonding that occurs in the compound.

Compound	Element 1 (metal or non-metal?)	Element 2 (metal or non-metal?)	Bond Type
NO <sub>2</sub>	N = non-metal	O = non-metal	covalent
NaCl			
SO <sub>2</sub>			
PO <sub>4</sub> <sup>3-</sup>			
MgBr <sub>2</sub>			
CaO			
H <sub>2</sub> O			
K <sub>2</sub> O			
Cu-Zn alloy			
O <sub>2</sub>			
CuCl <sub>2</sub>			
NO <sub>2</sub> <sup>-</sup>			
TiO <sub>2</sub>			
HF			
Rb <sub>2</sub> S			
Au-Ag mixture			
Fe <sub>2</sub> O <sub>3</sub>			
C <sub>6</sub> H <sub>12</sub> O <sub>22</sub>			