

Structure and Bonding

Element	# Valence Electrons	Lewis Diagram of Element	# of Electrons gained or lost to form stable ion	Ion Charge	Ion Lewis Diagram
H					
Li					
F					
Mg					
I					
Be					
O					
Al					
S					
Br					
N					
C					
Cl					
Ca					
B					

Ionic or Covalent

Compound	Reacting Elements (metal & non-metal or non-metal & non-metal)	Ionic or Covalent Bonding	Electrons "shared" or "gained & lost"
LiCl			
MgF ₂			
CO ₂			
NaBr			
H ₂ O			
CO			
CaCl ₂			
Al ₂ O ₃			
NH ₃			
CCl ₄			
B ₂ S ₃			
N ₂			
MgO			
CaS			

Model the bonding that would occur

Lithium and Fluorine	Oxygen (diatomic)
Sulphur and Fluorine	Magnesium and Iodine
Beryllium and Oxygen	Carbon and Chlorine
Aluminium and Sulfur	Nitrogen and Hydrogen
Hydrogen and Bromine	Sodium and Sulfur
Boron and Oxygen	Nitrogen (diatomic)