

## Chemical Bonding Practice      Name \_\_\_\_\_

Name \_\_\_\_\_

Using your periodic table

1. Identify the elements in each formula.
2. Categorize them as "metals" or "non-metals".
3. Determine the type of bond for each compound.

Formula	Metals	Non-metals	Type of Bond
HF		Hydrogen Fluorine	Covalent
NaCl	Sodium	Chlorine	Ionic
C <sub>4</sub> H <sub>10</sub>			
Al <sub>2</sub> O <sub>3</sub>			
CBr <sub>4</sub>			
Na <sub>2</sub> S			
Sr <sub>3</sub> N <sub>2</sub>			
H <sub>2</sub> S			
BaF <sub>2</sub>			
NO <sub>2</sub>			

Reminder: Covalent bonds are form between nonmetals.

Ionic bonds are formed between a metal and nonmetal.

**Metals, Nonmetals, and Metalloids**

Legend:

- metals (red)
- metalloids (yellow)
- nonmetals (blue)

Periodic Table Elements:

Row 1: H, He

Row 2: Li, Be, B, C, N, O, F, Ne

Row 3: Na, Mg, Al, Si, P, S, Cl, Ar

Row 4: K, Ca, Sc, Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, Ga, Ge, As, Se, Br, Kr

Row 5: Rb, Sr, Y, Zr, Nb, Mo, Tc, Ru, Rh, Pd, Ag, Cd, In, Sn, Sb, Te, I, Xe

Row 6: Cs, Ba, La, Hf, Ta, W, Re, Os, Ir, Pt, Au, Hg, Tl, Pb, Bi, Po, At, Rn

Row 7: Fr, Ra, Ac, Th, Pa, U, Np, Pu, Am, Cm, Bk, Cf, Es, Fm, Md, No, Lr

Row 8: Ce, Pr, Nd, Pm, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu

Row 9: Th, Pa, U, Np, Pu, Am, Cm, Bk, Cf, Es, Fm, Md, No, Lr