

### 23. Ionic Bonds and Compounds: Formation of Ionic Compounds

**Refer to the periodic table. Classify the elements by the most likely charge of the ion the element will form.**

# Periodic Table of the Elements

The periodic table displays elements organized by atomic number, with color-coded groups:

- Yellow:** Noble gases (He, Ne, Ar, Kr, Xe, Rn).
- Green:** Nonmetals (B, C, N, O, F, Si, P, S, Cl, Br, I, At).
- Blue:** Metalloids (Al, Ga, In, Sn, Sb, Te, Bi, Po, Tl, Pb, Bi, Po, At).
- Pink:** Alkali and alkaline earth metals (Li, Be, Na, Mg, K, Ca, Sc, Y, Zr, Nb, Mo, Tc, Ru, Rh, Pd, Ag, Cd, In, Sn, Sb, Te, Bi, Po, Tl, Pb, Bi, Po, At).
- Purple:** Transition metals (Fe, Co, Ni, Cu, Zn, Ga, Ge, As, Se, Br, Kr, Rb, Sr, Y, Zr, Nb, Mo, Tc, Ru, Rh, Pd, Ag, Cd, In, Sn, Sb, Te, Bi, Po, Tl, Pb, Bi, Po, At).

The lanthanide and actinide series are shown at the bottom in pink.

### Ion with 2- Charge

### Ion with 1- Charge

### Ion with 1+ Charge

### Ion with 2+ Charge

potassium (K)

selenium (Se)

oxygen (O)

beryllium (Be)

fluorine (F)

magnesium (Mg)

cesium (Cs)

bromine (Br)