

## Periodic Table and Simple Ionic Compounds

1. Complete the following Table:

Symbol	atomic no.	mass no.	no. of protons	no. of neutrons	no. of electrons	net charge
${}^{34}_{16}\text{Se}^{2-}$						
	23	51			20	
			20	20		2+

2. Would you expect each of the following atoms to gain or lose electrons when forming ions? What ion is the most likely in each case?

- K
- F
- Ca

3. Fill in the following table:

Name	Symbol	Group	Period	Metal, nonmetal or metalloid?	transition metal or main group?
sodium					
	Fe				
	O				

4. Give the formulas for the ionic compounds made of the following ions:

- $\text{Sc}^{3+}$  and  $\text{Br}^{-}$
- $\text{K}^{+}$  and  $\text{O}^{2-}$
- $\text{Ca}^{2+}$  and  $\text{I}^{-}$
- $\text{Cr}^{3+}$  and  $\text{S}^{2-}$
- $\text{Rb}^{+}$  and  $\text{F}^{-}$
- magnesium (Mg) and oxygen (O) ions
- potassium (K) and nitrogen (N) ions
- strontium (Sr) and fluorine (F) ions
- aluminum (Al) and sulfur (S) ions