

ELEMENTS AND THE PERIODIC TABLE SIMPLE IONS

Complete the following table. Note that the name of a *nonmetallic* ion ends in *ide* while the name for a *metallic* ion uses the full name of the metal.

Ion Name	Ion Symbol	Number of Protons	Number of Electrons	Number of Electrons Lost or Gained	Same Electrons as What Noble Gas?
e.g.; fluoride	F ⁻	9	10	gained one	neon
1.		53	54		
2.		16		gained two	
3. potassium				lost one	
4.	Ca ²⁺				
5.		35	36		
6.	Sr ²⁺				
7.	H ⁺				(none)
8.		8		gained two	
9.		12		lost two	
10. aluminum			10		
11.		34	36		
12.	H ⁻				
13. lithium				lost one	
14.	Rb ⁺				
15.		17	18		

On the ALCHEM periodic table that has been provided with this course the symbol for the calcium ion is listed as Ca²⁺. This ²⁺ symbol is recommended by IUPAC (The International Union of Pure and Applied Chemistry) (Section 1.31). The incorrect designation ⁺² is sometimes confused as indicating a positive number rather than indicating a positive *charge*.