

Review Exercise 3



1. Fill in the blanks in the following chart. The first question is done for you as an example:

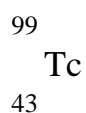
Atom or Ion Name	Symbol	Number of Protons	Number of Electrons	Number of Electrons Lost or Gained	Inert Gas Whose Electron Population is Like this Particle
e.g. fluoride	F ⁻	9	10	gained one	Neon
1.		53	54		
2.		16		gained two	
3. Potassium				lost one	
4.	Ca ²⁺				
5.		35	36		
6.	Sr ²⁺				
7.	H ⁺				
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		

2. Give the number of protons and electrons in the Sc^{3+} ion.

3. What is the symbol for an ion which has

- a) 10 electrons and 7 protons?
- b) 10 electrons and 12 protons

4. Technetium is an element used in brain scanning.



How many

- a) protons are present in the nucleus?
- b) neutrons are present in the nucleus?
- c) electrons are in a neutral Tc atom?
- d) electrons and protons are in a Tc^{3+} ion?