

## Atoms and Ions Practice

1. Identify each part of an atom, its charge, and its location in the atom.

Particle	Charge	Location

2. Why does an atom have no charge?
3. What is an ion?
4. What are valence electrons?
5. What is an anion? How does an anion form?
6. What is a cation? How does a cation form?
7. Beryllium has an atomic number of 4.
  - (a) How many valence electrons does beryllium have? \_\_\_\_\_
  - (b) Draw an electron dot diagram for beryllium.
  - (c) What is the charge of a beryllium ion? \_\_\_\_\_

9. Complete the following table.

Symbol	Name	Atomic number	# of valence electrons	Lose or gain electrons	Charge	Ionic symbol
N	Nitrogen	7	5	gain	3-	N <sup>3-</sup>
C						
		11				
He						
	Sulfur					
		13				
K						
		56				
		18				
Li						
	Oxygen					
B						
Mg						
	Fluorine					
P						