

Name: _____ Period: _____ Score: _____

Problem Set 18: Ions

Major Concepts

- Determine the number of valence electrons on an atom of a representative element
- Describe how cations and anions form
- Explain the electrical charge of an ionic compound
- Students learn the common ions

Reading

Chapter 3.10, 3.11, & 12.4

Using one paragraph per section, summarize the three sections you just read.

Reading Guide

Complete Reading Guide 18

Lecture Notes

Print and read *Lecture 18* from TheChemBook; Combine your notes from class with the notes on TheChemBook. Use the Cornell Notes Strategy to review your notes each night (5 min.).

Vocabulary

Define each vocabulary word.

Anion		
Cation	Ions	Representative elements

Questions and Problems

1. How is an ion formed?
 - a. Show how F forms an anion.
 - b. Show how Li forms a cation.
2. For each of the following atomic numbers, use the periodic table to write the formula (including the charge) for the simple ion that the element is most likely to form
 - a. 53
 - b. 38
 - c. 55
 - d. 88
 - e. 9
 - f. 13
3. Complete problem 52 in the textbook (p. 83)
4. List the common ions found in table 12.3 (p. 368)

Place your answers to problem set 18 in your 3-ring binder, Unit 2.