

# CHEM 120 Week 2 Discussion: Atomic Structure

*Morphine, C<sub>17</sub>H<sub>19</sub>NO<sub>3</sub>*

## Required Resources

Read/review the following resources for this activity:

- Textbook: Chapter 3, 7, and 8
- Weekly Concepts

## Initial Post Instructions

### Option 1:

Your initial post in the discussion this week consists of two parts. First, choose a molecule used in healthcare, industry, or found in a natural source and discuss the importance of this molecule. Be sure to include at least one outside source and make sure to follow APA citation guidelines. In the second part of your initial post, we will be practicing naming ionic and covalent compounds as well as polyatomic ions. To begin, give the chemical formula for each of the following: A covalent compound containing no more than two types of elements, an ionic compound no more than two types of elements, and an ionic compound containing a polyatomic. Be sure that these compounds are valid (for example, the charges balance out in the ionic compound) and that the subscripts do not exceed 10.

### Option 2:

Your initial post in the discussion this week consists of two parts. First, choose a molecule used in healthcare, industry, or found in a natural source and discuss the importance of this molecule. Be sure to include at least one outside source and make sure to follow APA citation guidelines.

The electron configuration of an atom determines the number of electrons available to participate in bonding with another atom. One method of depicting the valence electrons that an atom has is through the Lewis structure. For the second part of your initial post, pick an element from the periodic table of elements. Identify the valence electrons and the orbitals in which they reside.