

**Objective:** Draw a Lewis dot diagram for the elements.

**Lewis diagrams show the valance electrons.**

In our previous notes we learned that atoms have \_\_\_\_\_ of electrons. The outermost shell is called the \_\_\_\_\_. Usually, the valence is not full (with the exception of the \_\_\_\_\_.)

The Lewis diagram shows how many \_\_\_\_\_ are in the valence. Knowing this will help you understand how the periodic table is organized. Below is an example of a Lewis diagram.



What is this element? \_\_\_\_\_

How many electrons are in the valence? \_\_\_\_\_



What is this element? \_\_\_\_\_

How many electrons are in the valence? \_\_\_\_\_

To make a Lewis diagram:

1. Write the element symbol.
2. Figure out how many electrons are in the outermost shell.
3. Draw one dot for each electron around the element. (There is a specific order for it, but we won't worry about that for now.)

**Try it Out**

Make a Lewis diagram for the following elements: Hydrogen, Helium, Oxygen, and Neon.