

**Lewis (Electron) Dot Diagrams**

Valence shell: \_\_\_\_\_

Valence Electrons: \_\_\_\_\_

Lewis structure \_\_\_\_\_

- Chemical reactivity is determined by \_\_\_\_\_

**Magnesium**

**Fluorine**

Bohr-Rutherford diagram

Lewis Dot diagram

Bohr-Rutherford diagram

Lewis Dot diagram

**Stable Octet:** When atoms have a \_\_\_\_\_ valence shell

- Atoms \_\_\_\_\_ electrons in order to achieve a stable octet.

**Ions**

Ion: an atom that has \_\_\_\_\_. An ion is a \_\_\_\_\_.

When an atom \_\_\_\_\_, it becomes a \_\_\_\_\_ ( an ion with a positive charge)

When an atom \_\_\_\_\_, it becomes an \_\_\_\_\_ (an ion with a negative charge).

An atom \_\_\_\_\_ gain or lose \_\_\_\_\_ to form an ion.

Complete the following table:

Element	Lewis Dot diagram	# of valence e <sup>-</sup>	Gains / loses e <sup>-</sup> ?	Charge on atom	Ion Symbol	Lewis Symbol for ion
Li						
Mg						
Ca						
Cl						
O						

Naming Ions

- **Cations:** use \_\_\_\_\_

- Name the above cations:

- **Anions:** use the \_\_\_\_\_

- Name the above anions:

