

## Valence Electrons

- **Valence electrons** are located at the outermost shell of the atom, which participates in forming bonds with other elements and in chemical reactions.
- In a single **covalent bond**, both atoms are known to contribute one valence electron to form a shared pair.
- You could find valence electrons of any particular element by figuring out the **electronic configuration** of that element.
- The total number of electrons in the outermost shell would give you the valence electron number.
- For a **transition metal**, valence electrons could exist in the inner shell.

## Valence Electrons In Beryllium

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- For the **main groups of elements** in the periodic table, the valence electrons are only located at the outermost shell.
- A valence electron is known to either lose or absorb energy in the form of a **photon**.
- **Beryllium** has an electronic configuration of  $1s^2 2s^2$  as the atomic number of Beryllium is 4; hence, the Beryllium valence electrons would be 2.

