

Noble Gas Configurations

- Noble Gas Notation (Configuration)
 1. Where are the noble gases located on the periodic table?
 2. What do the noble gases represent in a noble gas configuration?
 - Example: Neon and Sodium
 3. Why do we use noble gas configurations?
 4. What are the steps for writing a noble gas notation (configuration)?
 - a.
 - b.
 - c.
 - d.

Example: Sodium

- Practice: Write the noble gas notations for the following elements:

Germanium (Ge)

Astatine (At)

Cesium (Cs)

Copper (Cu)

5. How can we identify an element?

Examples: $[\text{Xe}]6s^24f^{14}5d^{10}6p^4$ _____

$[\text{He}]2s^1$ _____

Ions & Configurations

- Define the Octet Rule:
- Practice: How many electrons will be gained or lost by the following elements?
 - Mg _____
 - N _____
 - Cl _____
 - Ne _____
 - K _____

Write the electron configurations for the following ions:

- a. Oxygen _____
- b. Br^- _____
- c. Strontium _____
- d. Cr^{2+} _____