

Name _____

H Chem, Period _____

Electron Configuration Worksheet

Write the full electron configuration for the following elements. Write the number of electrons first.

1. Li # e⁻ _____ e⁻ configuration _____
2. Be # e⁻ _____ e⁻ configuration _____
3. C # e⁻ _____ e⁻ configuration _____
4. O # e⁻ _____ e⁻ configuration _____
5. Ne # e⁻ _____ e⁻ configuration _____
6. P # e⁻ _____ e⁻ configuration _____
7. Cl # e⁻ _____ e⁻ configuration _____
8. Ca # e⁻ _____ e⁻ configuration _____
9. V # e⁻ _____ e⁻ configuration _____
10. Zr # e⁻ _____ e⁻ configuration _____

Write the noble gas configuration or core notation for the following elements.

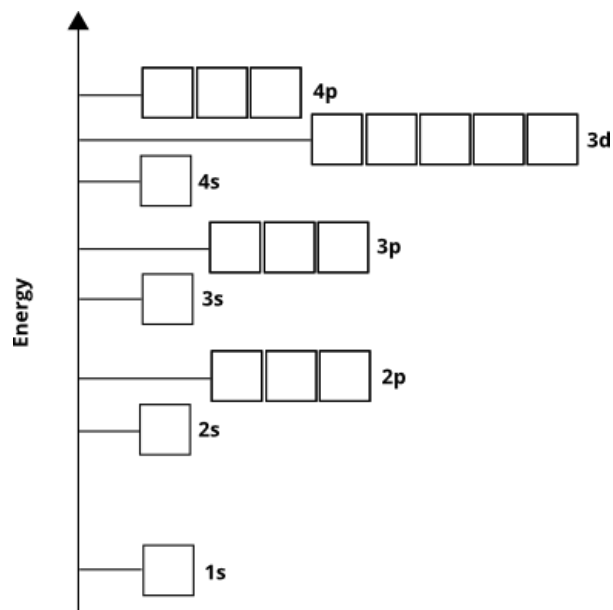
1. P
2. Ba
3. Zn
4. Se
5. I
6. Ta

Write the electron configuration, number of valence electrons, and fill in the Aufbau diagrams (orbital filling diagrams) for the following elements. Remember the following Rules and Principles:

- ◆ **Hund's Rule:** One electron goes into each orbital group before they pair up.
- ◆ **Pauli Exclusion Principle:** Each orbital can only hold two electrons. There is only
- ◆ **Aufbau Principle:** Electrons fill the lowest energy orbitals first.

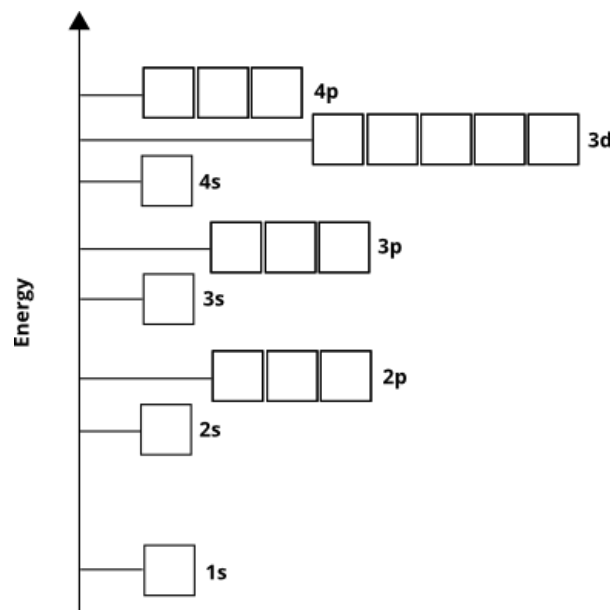
1. fluorine:

of Valence electrons: _____



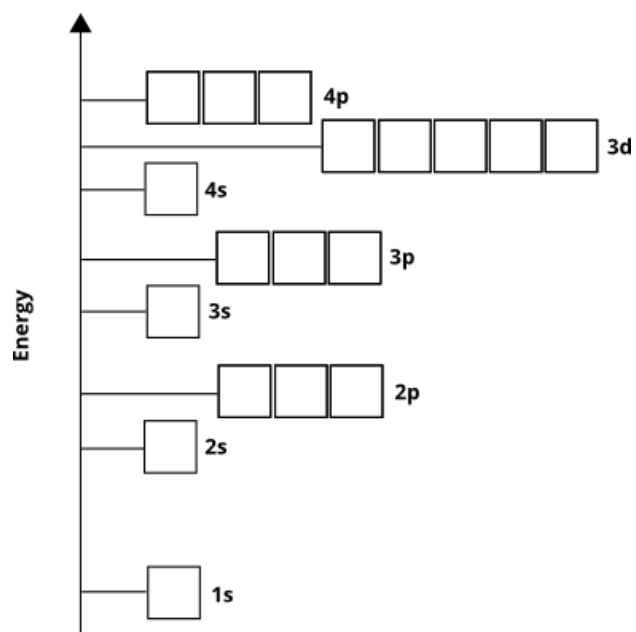
2. sulfur:

of Valence electrons: _____



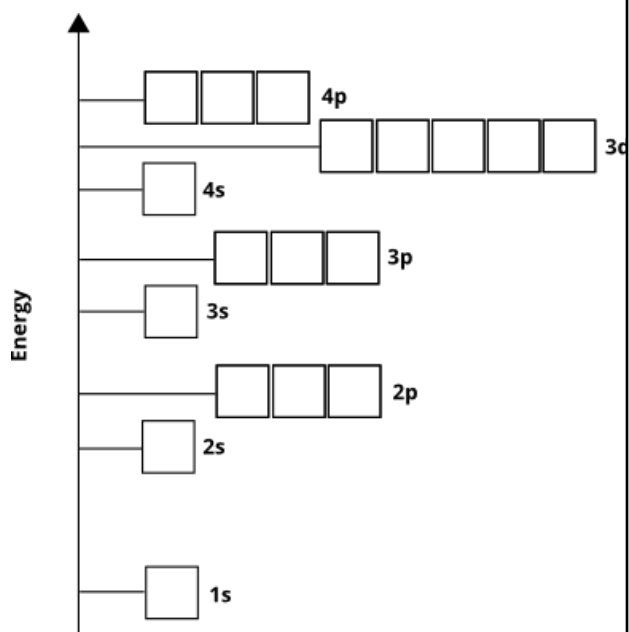
3. nickel:

of Valence electrons: _____



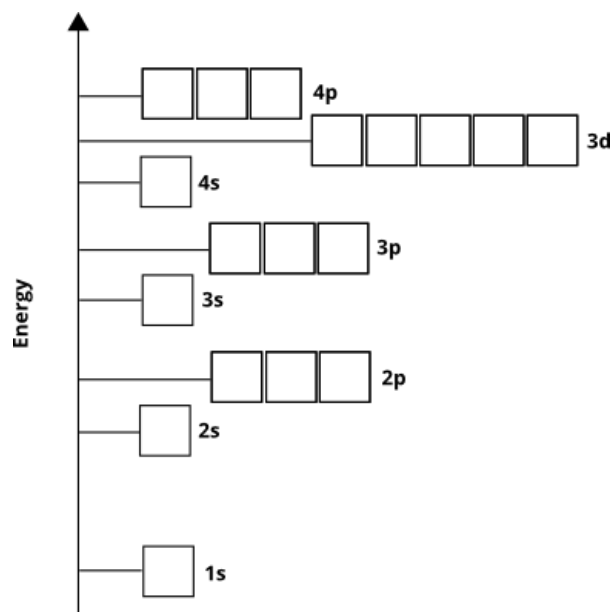
4. germanium:

of Valence electrons: _____



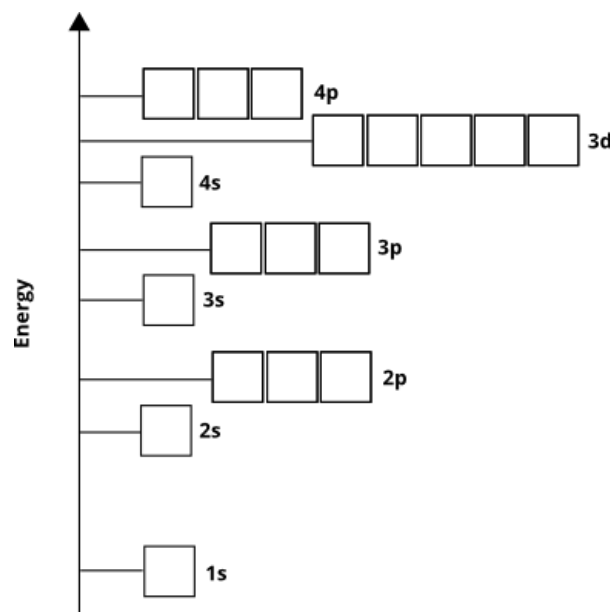
5. magnesium:

of Valence electrons: _____



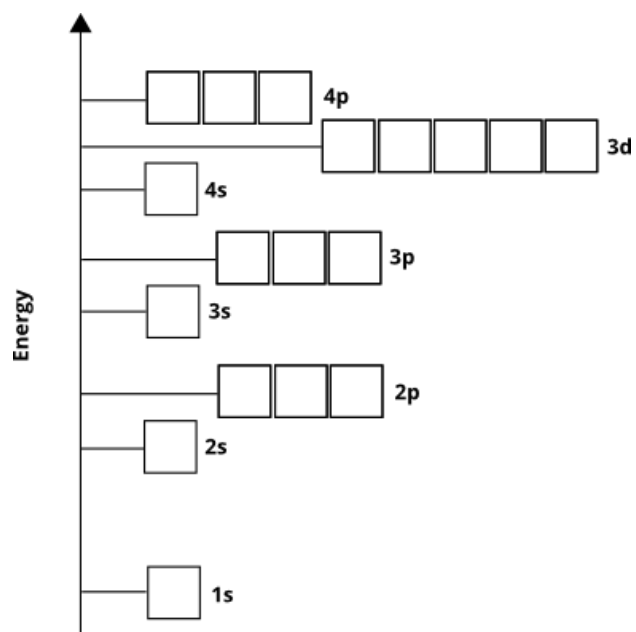
6. vanadium:

of Valence electrons: _____



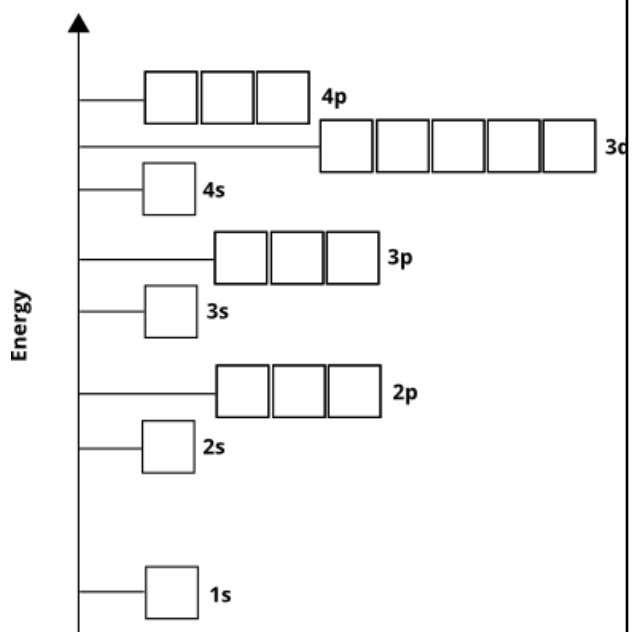
7. nitrogen:

of Valence electrons: _____



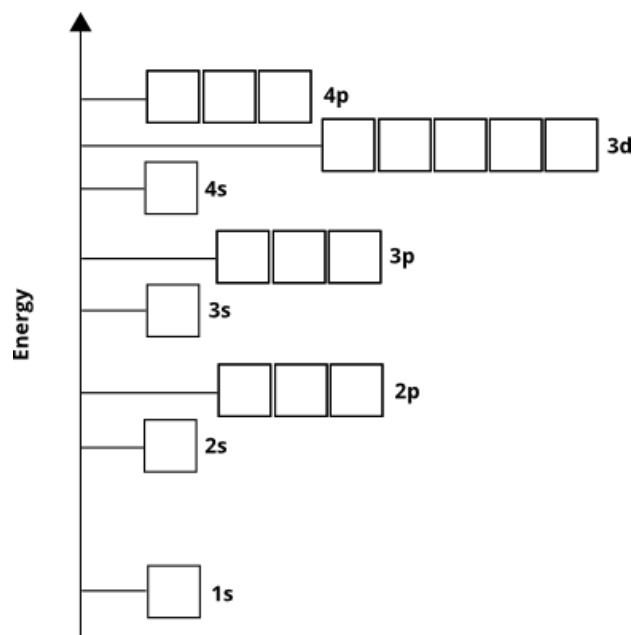
8. potassium:

of Valence electrons: _____



9. chromium:

of Valence electrons: _____



10. copper:

of Valence electrons: _____

