

NAME:

**HONORS CHEMISTRY**

SECTION:

*Writing Electron Configurations*

Summarize the three rules for writing electron configurations:

- Aufbau principle
- Pauli Exclusion Principle
- Hund's Rule

What are valence electrons?

Mnemonic for orbital filling sequence:

Write ground state electron configurations for the following elements

1. Phosphorus

Orbital notation (arrows and boxes)	
Spectroscopic notation	Noble gas notation
Number of valence electrons:	

## 2. Titanium

Orbital notation (arrows and boxes)	
Spectroscopic notation	Noble gas notation
Number of valence electrons:	

## 3. Selenium

Orbital notation (arrows and boxes)	
Spectroscopic notation	Noble gas notation
Number of valence electrons:	

## 4. Iron

Orbital notation (arrows and boxes)	
Spectroscopic notation	Noble gas notation
Number of valence electrons: 2 for all d-block elements!	