

## Atomic Theories, Isotopes, Rules/Principles, Electron Configurations, Orbital Diagrams Practice

\*\*\*\*Atomic Theories: 8 matching of the gents with their ideas

Provide the isotope formula for each of the following, showing the mass number, the atomic number, and the symbol of the element:

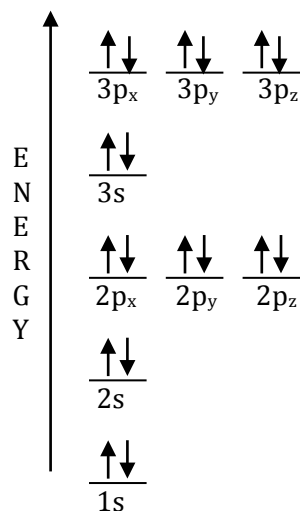
- lithium with 4 neutrons
- technetium with 56 neutrons

State each of the following principles or rules in complete sentences:

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

State the name of the element represented by each of the following electron configurations or orbital diagram:

- $[\text{Ar}]4s^23d^{10}4p^2$
- $[\text{Rn}]7s^25f^{14}6d^2$
- $1s^22s^22p^63s^23p^64s^23d^{10}4p^65s^14d^{10}$
- 



Give the shorthand electron configuration of each of the following elements:

- tellurium
- bohrium
- chromium

- Give the longhand electron configuration of sulfur, and give the complete orbital diagram of the sulfur atom.