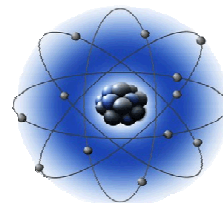


Name: _____ Date: _____
Chemistry

Worksheet



Electron Arrangements Review

DIRECTIONS: Write proper name for the following rules or principles.

1. _____ No two electrons in the same atom may have the same four quantum numbers.
2. _____ Electrons will fill the lowest energy levels first.
3. _____ In p, d, and f subshells each orbital must have one electron before pairing.

DIRECTIONS: Determine which elements have the following electron configurations.

4. _____ $1s^2 2s^2 2p^6 3s^2$
5. _____ $1s^2 2s^2 2p^6 3s^2 3p^6 4s^1$

DIRECTIONS: Write the electron configuration for the following.

6. N _____
7. Cr _____

DIRECTIONS: Write the orbital notation for the following elements.

8. P _____
9. Cl _____

DIRECTIONS: Write the quantum numbers for the ninth electron in magnesium

10. n = ____ l = ____ m = ____ m_s = ____

DIRECTIONS: Write the quantum numbers for the valence electrons of arsenic.

- | | | | |
|----------|----------|----------|--------------|
| n = ____ | l = ____ | m = ____ | m_s = ____ |
| n = ____ | l = ____ | m = ____ | m_s = ____ |
| n = ____ | l = ____ | m = ____ | m_s = ____ |
| n = ____ | l = ____ | m = ____ | m_s = ____ |
| n = ____ | l = ____ | m = ____ | m_s = ____ |

**"You don't just stumble into the future. You create your own."
-Roger Smith**