

Orbital Filling Diagram

The diagram illustrates the periodic table with the following structure:

- Periods (Rows):** Labeled 1 through 7 on the left.
- Groups (Columns):** Labeled 1A, 2A, 3A, 4A, 5A, 6A, 7A, and 8A at the top.
- Orbital Notation:**
 - s-block (Green):** Contains orbitals 1s, 2s, 3s, 4s, 5s, 6s, 7s.
 - d-block (Cyan):** Contains orbitals 3d, 4d, 5d, 6d.
 - p-block (Yellow):** Contains orbitals 2p, 3p, 4p, 5p, 6p.
 - f-block (Orange):** Shown as two rows below the main table, containing orbitals 4f and 5f. Arrows indicate its placement between the 6th and 7th periods.
- Specific Elements:** Lanthanum (La) and Actinium (Ac) are labeled in the 6th and 7th periods, respectively, within the d-block area.