

A large, faint Bohr diagram of an atom serves as the background. It features a central nucleus with red and green spheres, surrounded by three concentric elliptical orbits. Six small orange spheres are positioned at various points along these orbits.

Drawing Bohr Diagrams

Visualizing Atoms

Getting the Data

- Information about the atom comes from the *Periodic Table*.
- Example: Sodium

Mass:

22.98977 amu

Atomic
Number:

11

Electron
Configuration:

2-8-1

Using the Data

- Unless the mass number (A) of a specific isotope is given, round off the atomic mass to get the mass number of the most common isotope: $22.98977 \text{ amu} \approx 23 \text{ amu}$
- You should now have the following data:

A	Z	N	Electron Configuration
23	11	12	2-8-1

- Subtract the atomic number from the mass number to get the number of neutrons.

Drawing from the Data

A	Z	N	Electron Configuration
23	11	12	2-8-1

- Write the number of protons followed by "P."
- Write the number of neutrons followed by "N."
- Draw an arc to represent each energy level with the correct number of electrons followed by the symbol "e⁻."

