

Using the Periodic Table - Example Magnesium and Nitrogen

Magnesium

Bohr Rutherford Model (P, E, N)

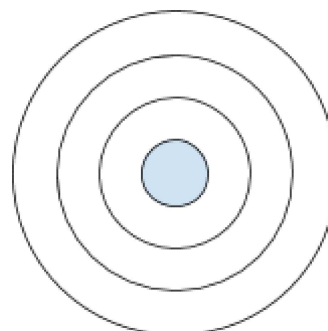
Group 2 → two valence electrons

Period 3 → three electron shells

Atomic number 12 → 12 protons
→ 12 electrons

Atomic Mass 24.31 → Mass = 24

Neutrons = Atomic Mass - Atomic Number
= 24 - 12
= 12 neutrons



Lewis Model (only Valence Electrons)

Mg

Nitrogen

Bohr Rutherford Model (P, E, N)

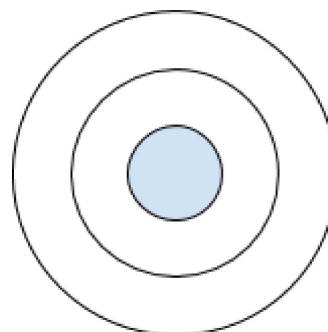
Group 15 → 5 valence electrons

Period 2 → 2 electron shells

Atomic number 7 → 7 protons
→ 7 electrons

Atomic Mass 14.01 → Mass = 14

Neutrons = Atomic Mass - Atomic Number
= 14 - 7
= 7 neutrons



Lewis Model (only Valence Electrons)

N