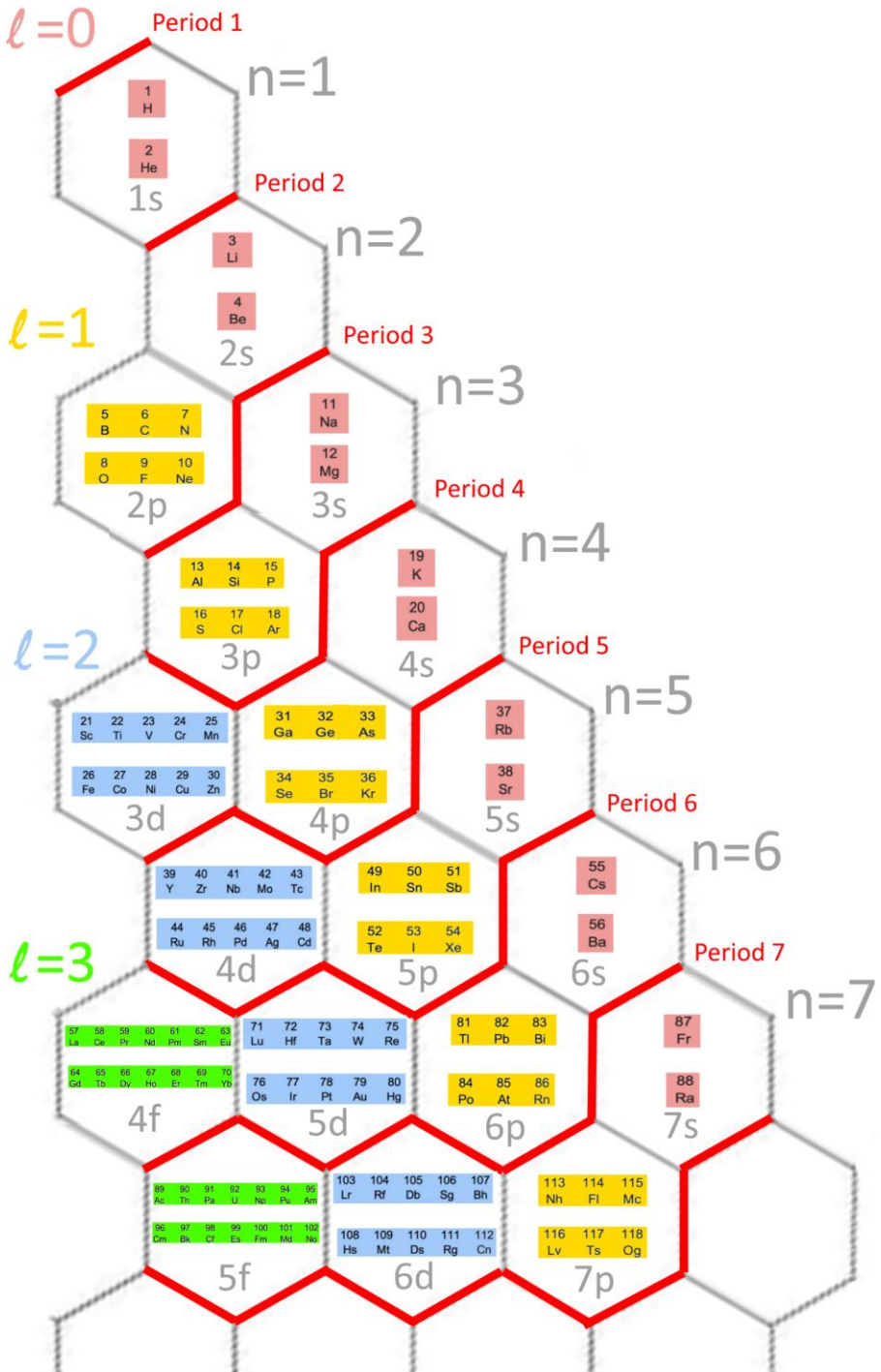
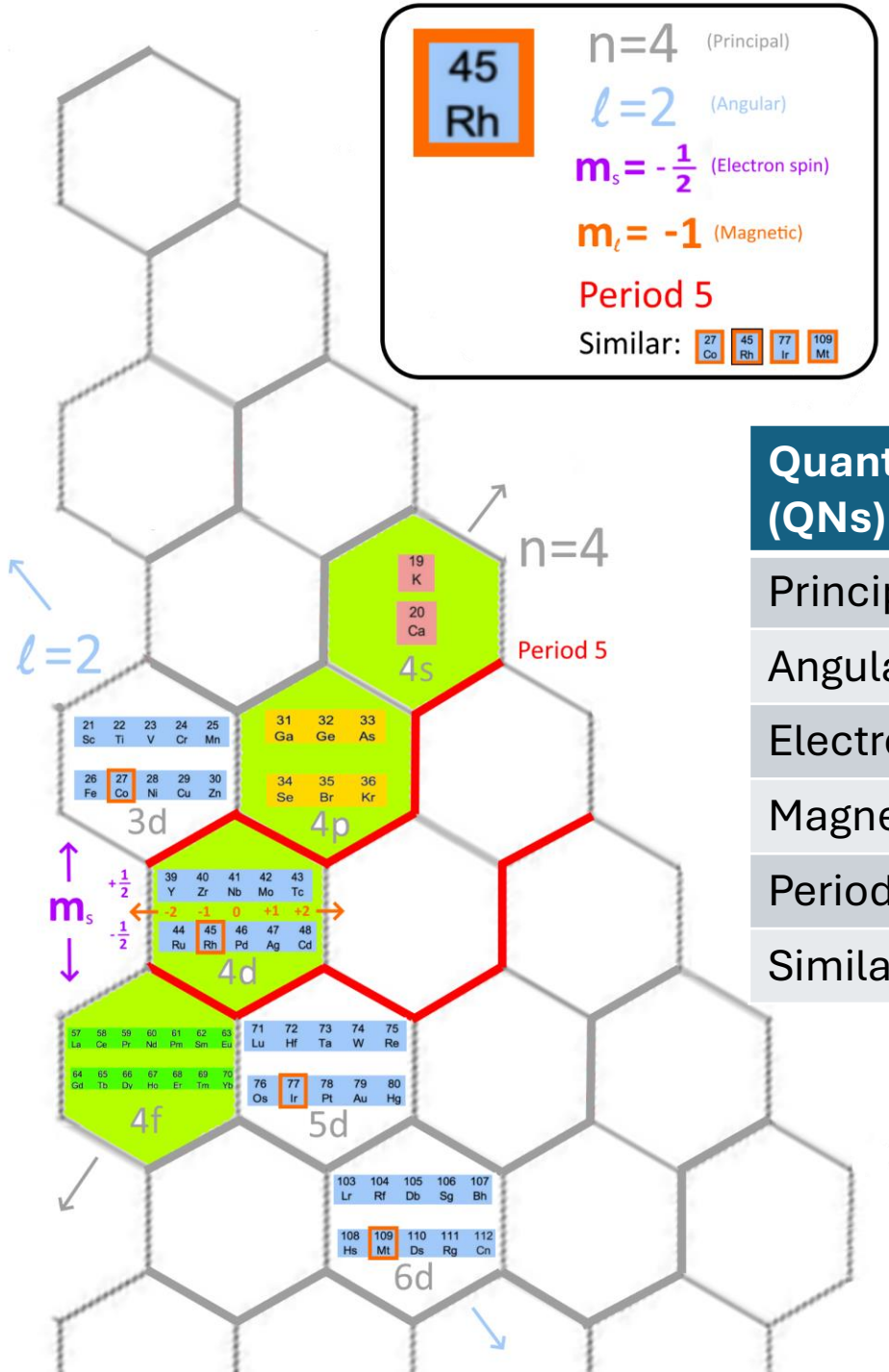
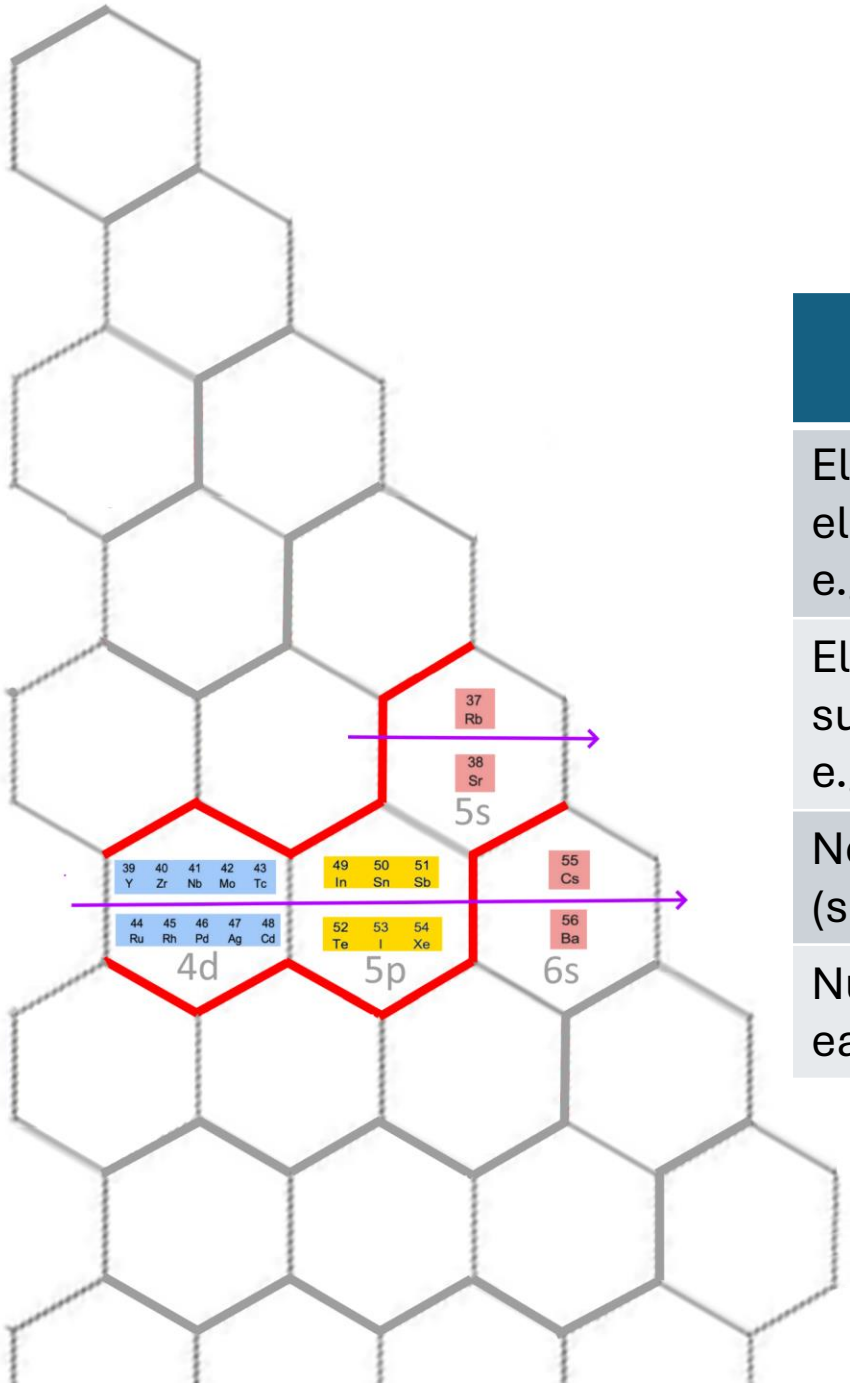


HexaFrame periodic table



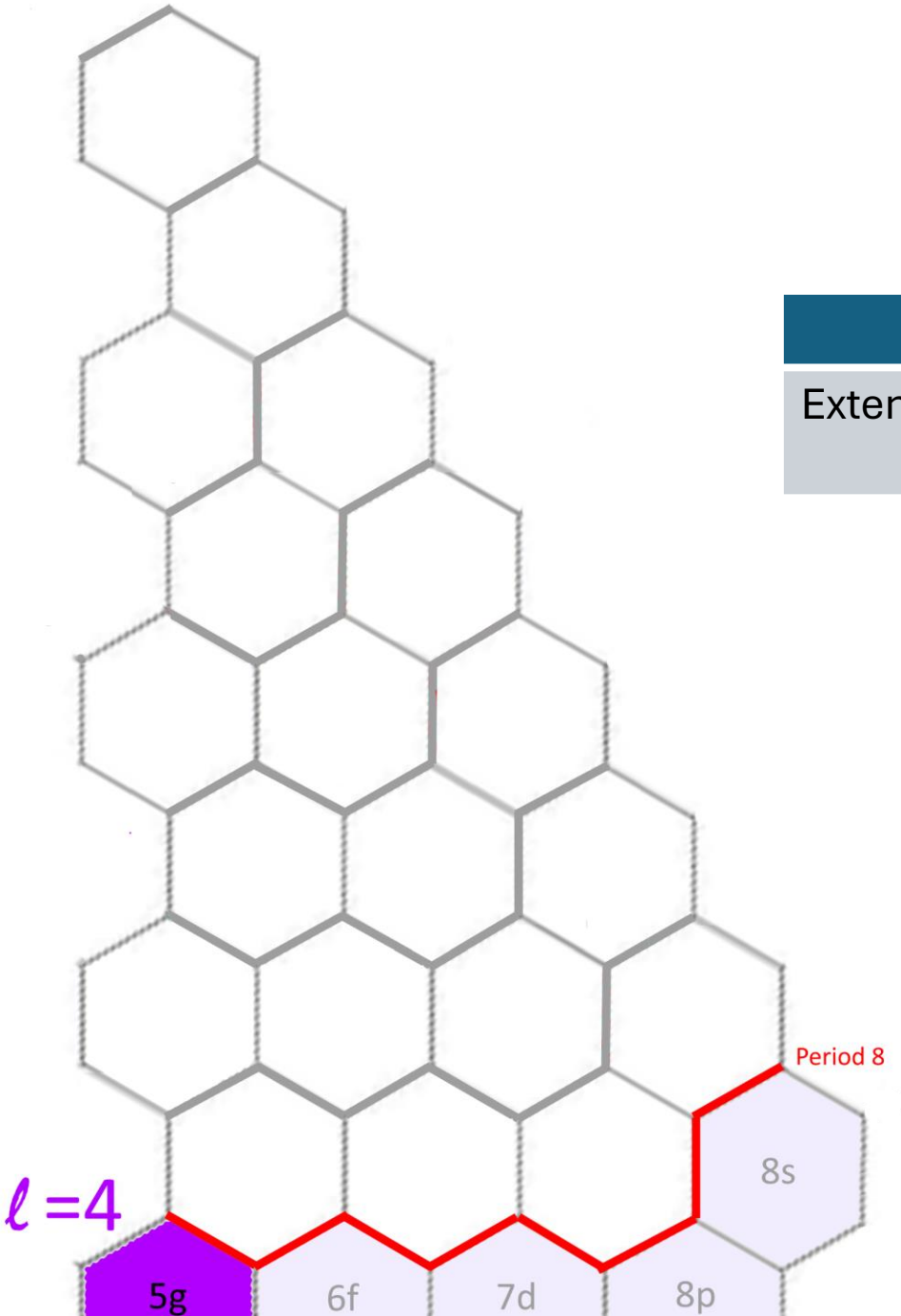
Pro: Coordinates can determine quantum numbers (QNs) easily

Quantum Numbers (QNs) and other info	Traditional Table	HexaFrame Table
Principal QN (n)	Less intuitive	Easy
Angular QN (l)	Easy	Easy
Electron spin QN (m_s)	Less intuitive	Easy
Magnetic QN (m_l)	Difficult	Easy
Period	Easy	Easy
Similar elements	Easy	Easy



Pro: perform element number accounting easily

	Reflected in Traditional Table	Reflected in HexaFrame Table
Electron filling order of elements e.g. Rb 37 → Sr 38 → Y 39…	Yes	Yes
Electron filling order of subshells e.g. 5s → 4d → 5p → 6s …	Less intuitive	Yes
No. of elements of block (s:p:d:f = 1:3:5:7)	Difficult to see	Yes
Number of elements of each period	Less intuitive	Yes e.g. Period 5: (1 + 3 + 5)*2



Pro: Can be extended easily

	Traditional Table	HexaFrame Table
Extend to period 8	Need to find new space for block g	Already have a place for block g

References

- Blog post: The HexaFrame Periodic Table
- Other possible form of periodic table: Wikipedia
- Traditional regtangular periodic table: