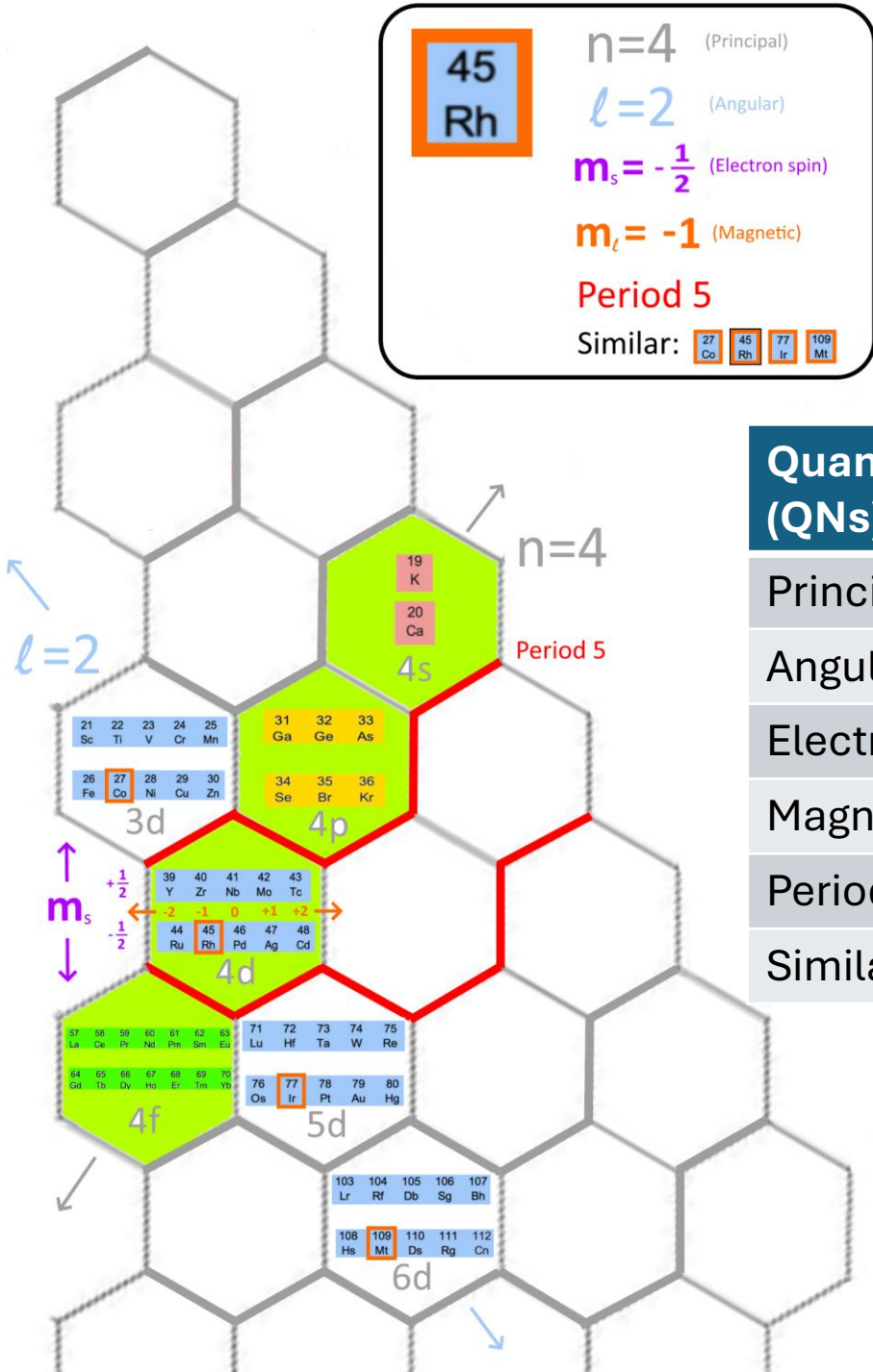


HexaFrame periodic table



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

The diagram illustrates the filling order of atomic orbitals in a honeycomb lattice. The orbitals are highlighted in red and labeled 4d, 5p, 5s, and 6s. Elements are grouped by color: blue for s-block, yellow for p-block, and red for d-block. Arrows indicate the sequence of filling from left to right and top to bottom.

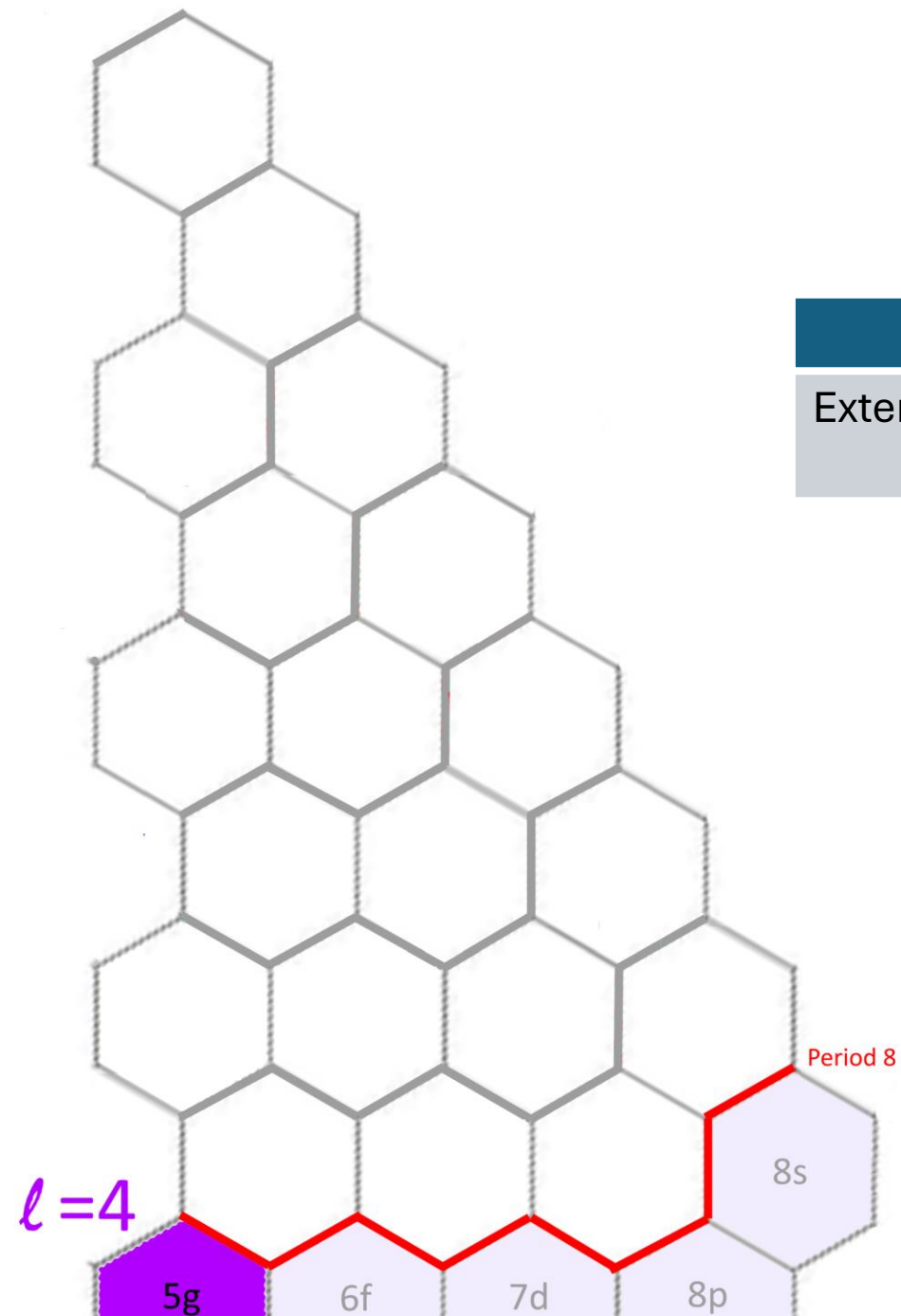
Element	Atomic Number	Block
Y	39	s
Zr	40	s
Nb	41	d
Mo	42	d
Tc	43	d
Ru	44	d
Rh	45	d
Pd	46	d
Ag	47	d
Cd	48	d
In	49	p
Sn	50	p
Sb	51	p
Te	52	p
I	53	p
Xe	54	p
Rb	37	s
Sr	38	s
Cs	55	s
Ba	56	s

The diagram illustrates the filling order of atomic orbitals in a honeycomb lattice. The orbitals are highlighted in red and labeled 4d, 5p, 5s, and 6s. Elements are color-coded: blue for s-block, yellow for p-block, and red for d-block. Purple arrows indicate the filling sequence from left to right and then down.

Element	Atomic Number	Block
Y	39	s
Zr	40	s
Nb	41	d
Mo	42	d
Tc	43	d
Ru	44	s
Rh	45	s
Pd	46	d
Ag	47	d
Cd	48	s
In	49	p
Sn	50	p
Sb	51	p
Te	52	p
I	53	p
Xe	54	p
Rb	37	s
Sr	38	s
Cs	55	s
Ba	56	s

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 rectangular periodic table:

Group ▶	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18										
Period ▼																												
	<i>Noble gases</i>																											
	<div>Some elements near the dashed staircase are sometimes called <i>metalloids</i></div>																											
<i>Nonmetals</i>	1 H																		2 He									
<i>Metals</i>	3 Li	4 Be											5 B	6 C	7 N	8 O	9 F	10 Ne										
	11 Na	12 Mg											13 Al	14 Si	15 P	16 S	17 Cl	18 Ar										
	19 K	20 Ca											21 Sc	22 Ti	23 V	24 Cr	25 Mn	26 Fe	27 Co	28 Ni	29 Cu	30 Zn	31 Ga	32 Ge	33 As	34 Se	35 Br	36 Kr
	37 Rb	38 Sr											39 Y	40 Zr	41 Nb	42 Mo	43 Tc	44 Ru	45 Rh	46 Pd	47 Ag	48 Cd	49 In	50 Sn	51 Sb	52 Te	53 I	54 Xe
	55 Cs	56 Ba	La to Yb	71 Lu	72 Hf	73 Ta	74 W	75 Re	76 Os	77 Ir	78 Pt	79 Au	80 Hg	81 Tl	82 Pb	83 Bi	84 Po	85 At	86 Rn									
	87 Fr	88 Ra	Ac to No	103 Lr	104 Rf	105 Db	106 Sg	107 Bh	108 Hs	109 Mt	110 Ds	111 Rg	112 Cn	113 Nh	114 Fl	115 Mc	116 Lv	117 Ts	118 Og									
	s-block (plus He)		f-block	d-block										p-block (excluding He)														
			Lanthanides	57 La	58 Ce	59 Pr	60 Nd	61 Pm	62 Sm	63 Eu	64 Gd	65 Tb	66 Dy	67 Ho	68 Er	69 Tm	70 Yb											
			Actinides	89 Ac	90 Th	91 Pa	92 U	93 Np	94 Pu	95 Am	96 Cm	97 Bk	98 Cf	99 Es	100 Fm	101 Md	102 No											