

- Periodic Table of elements
- Alkali metals - red
- Alkaline Earth metals - blue
- Transition metals - use a {bracket}
- Halogens - pink
- Noble gases - green
- Actinide Series - yellow
- Lanthanide Series - purple
- Metalloids - orange & bold stair step line

4. The period number tells me

# of electron clouds

5. The group numbers tell me

the # of valence electrons

- 6. Group 1 has 1 valence electrons
- 7. Group 2 has 2 valence electrons
- 8. Group 13 has 3 valence electrons
- 9. Group 14 has 4 valence electrons
- 10. Group 15 has 5 valence electrons
- 11. Group 16 has 6 valence electrons
- 12. Group 17 has 7 valence electrons
- 13. Group 18 has 8 valence electrons

Atomic number	14	
Symbol	Si	Silicon
Atomic mass	28.086	

1. How many electrons fit in the first shell?  
# of valence electrons = 1  
Reactivity level = 1  
stands alone

2. How many valence electrons fit in the second shell?  
# of valence electrons = 2  
Reactivity level = 2  
reactive

3. Which element does not follow the pattern of valence electrons?  
# of valence electrons = 3  
Reactivity level = 3  
transitions metals  
they don't seem to follow the pattern

4. How many valence electrons fit in the third shell?  
# of valence electrons = 4  
Reactivity level = 4  
reactive

5. How many valence electrons fit in the fourth shell?  
# of valence electrons = 5  
Reactivity level = 5  
reactive

6. How many valence electrons fit in the fifth shell?  
# of valence electrons = 6  
Reactivity level = 6  
reactive

7. How many valence electrons fit in the sixth shell?  
# of valence electrons = 7  
Reactivity level = 7  
very reactive

8. How many valence electrons fit in the seventh shell?  
# of valence electrons = 8  
Reactivity level = 8  
not reactive

9. How many valence electrons fit in the eighth shell?  
# of valence electrons = 9  
Reactivity level = 9  
not reactive

10. How many valence electrons fit in the ninth shell?  
# of valence electrons = 10  
Reactivity level = 10  
not reactive

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
H	He	Li	Be	B	C	N	O	F	Ne	Na	Mg	Al	Si	P	S	Cl	Ar
K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr
Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe
Cs	Ba	La	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn
Fr	Ra	Ac	Rf	Db	Sg	Bh	Hs	Mt									

59	60	61	62	63	64	65	66	67	68	69	70	71	
Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu
89	90	91	92	93	94	95	96	97	98	99	100	101	
Th	Pa	U	Np	Pu	Am	Cm	Bk	Cf	Es	Fm	Md	No	Lr

Mass numbers in parentheses are those of the most stable or most common isotopes.