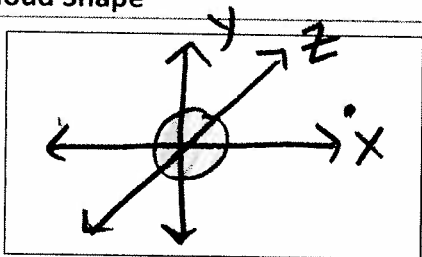


Orbital Diagram/Notation

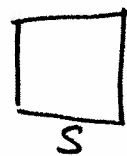
Instead of drawing the shape(s), boxes are drawn to represent the shape

Electron Cloud Shape

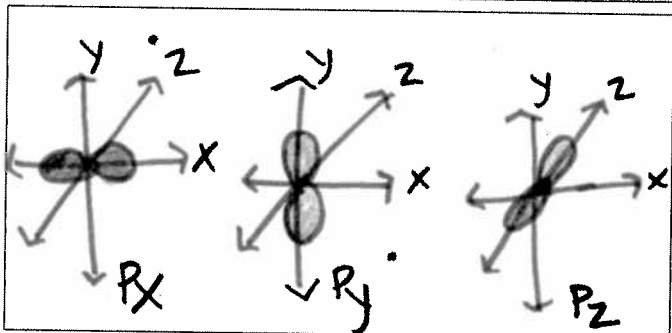
s



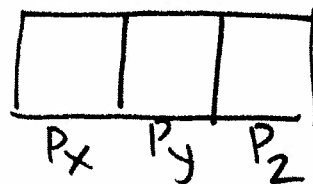
Instead draw →
1 shape = 1 box



p

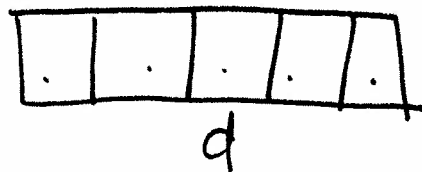
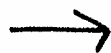
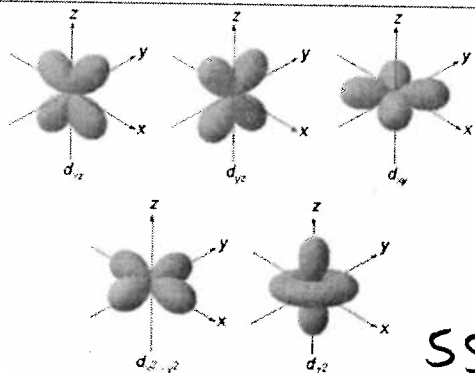


Instead draw →



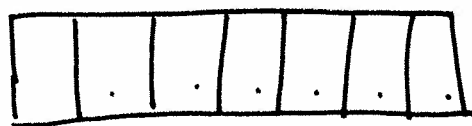
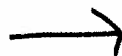
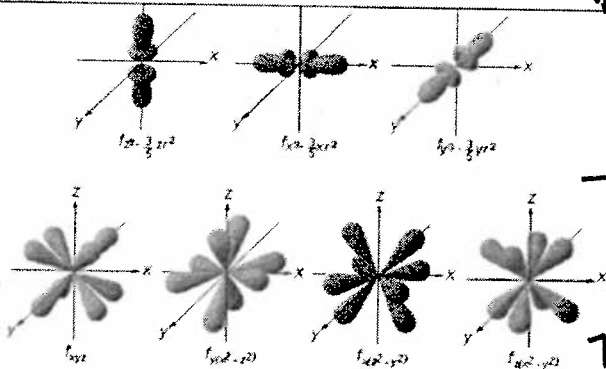
3 shapes = 3 boxes

d



5 shapes = 5 boxes

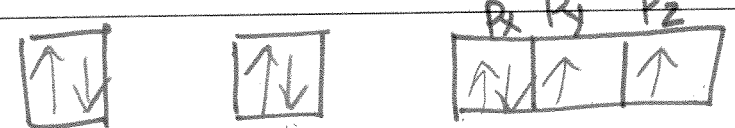
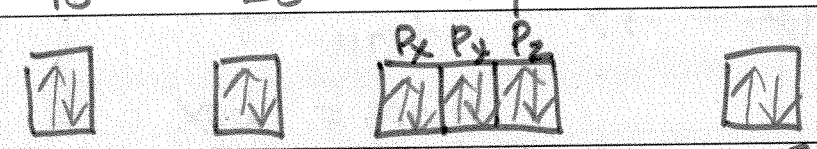
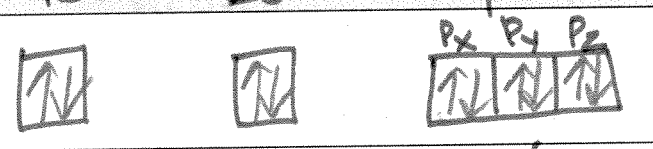
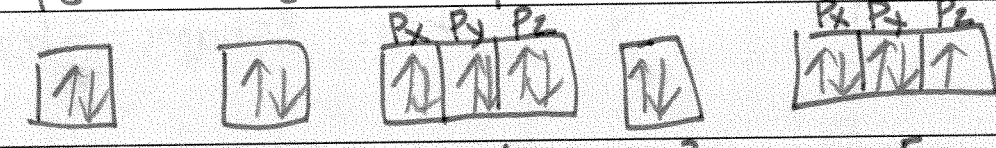
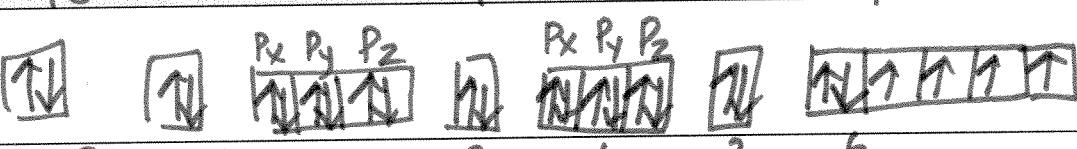
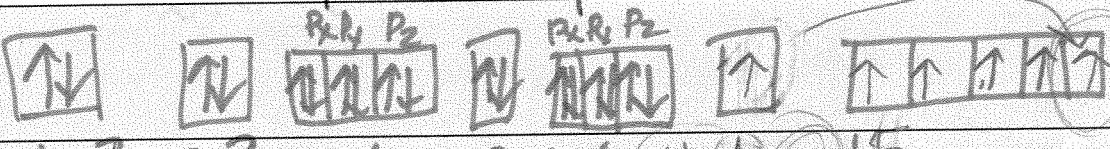

f



7 shapes = 7 boxes

Na	Orbital Diagram	
	Electron Configuration	$1s^2 2s^2 2p^6 3s^1$
C	Orbital Diagram	
	Electron Configuration	$1s^2 2s^2 2p^2$

Heisenberg: can't know the location & the speed of e-

O	Orbital Diagram	
	Stable or Unstable	Electron Configuration: $1s^2 2s^2 2p^4$
Mg	Orbital Diagram	
	Stable or Unstable	Electron Configuration: $1s^2 2s^2 2p^6 3s^2$ <i>full sublevel</i>
Ne	Orbital Diagram	
	Stable or Unstable	Electron Configuration: $1s^2 2s^2 2p^6$ <i>unreactive Full E level</i>
Cl	Orbital Diagram	
	Stable or Unstable	Electron Configuration: $1s^2 2s^2 2p^6 3s^2 3p^5$
Fe	Orbital Diagram	
	Stable or Unstable	Electron Configuration: $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^6$
*Cr	Orbital Diagram	
	Stable or Unstable	Electron Configuration: $1s^2 2s^2 2p^6 3s^2 3p^6 4s^1 3d^5$
*Cu	Orbital Diagram	
	Stable or Unstable	Electron Configuration: $1s^2 2s^2 2p^6 3s^2 3p^6 4s^1 3d^{10}$
Kr	Orbital Diagram	
	Stable or Unstable	Electron Configuration
As	Orbital Diagram	
	Stable or Unstable	Electron Configuration

Stable is a filled energy level (unreactive)

or

sub-level (still reacts)

how to see: $ns^2 np^6, 1s^2, n^2 nd^{10} np^6$ or $ns^2, ns^2 nd^{10}$