PS 6-1

$E = hf$

$c = f\lambda$

$\frac{\lambda}{1} = \frac{h}{mv}$

(b) $E = R_H\left(\frac{1}{n_i^2} - \frac{1}{n_f^2}\right)$

Max #e⁻ $2n^2$

Oct 28-7:43 AM

$\frac{\lambda}{1} = \frac{h}{mv}$

$\frac{v}{1} = \frac{h}{m\lambda}$

SIZE n = PEL

SHAPE l = Sublevel (azimuthal)

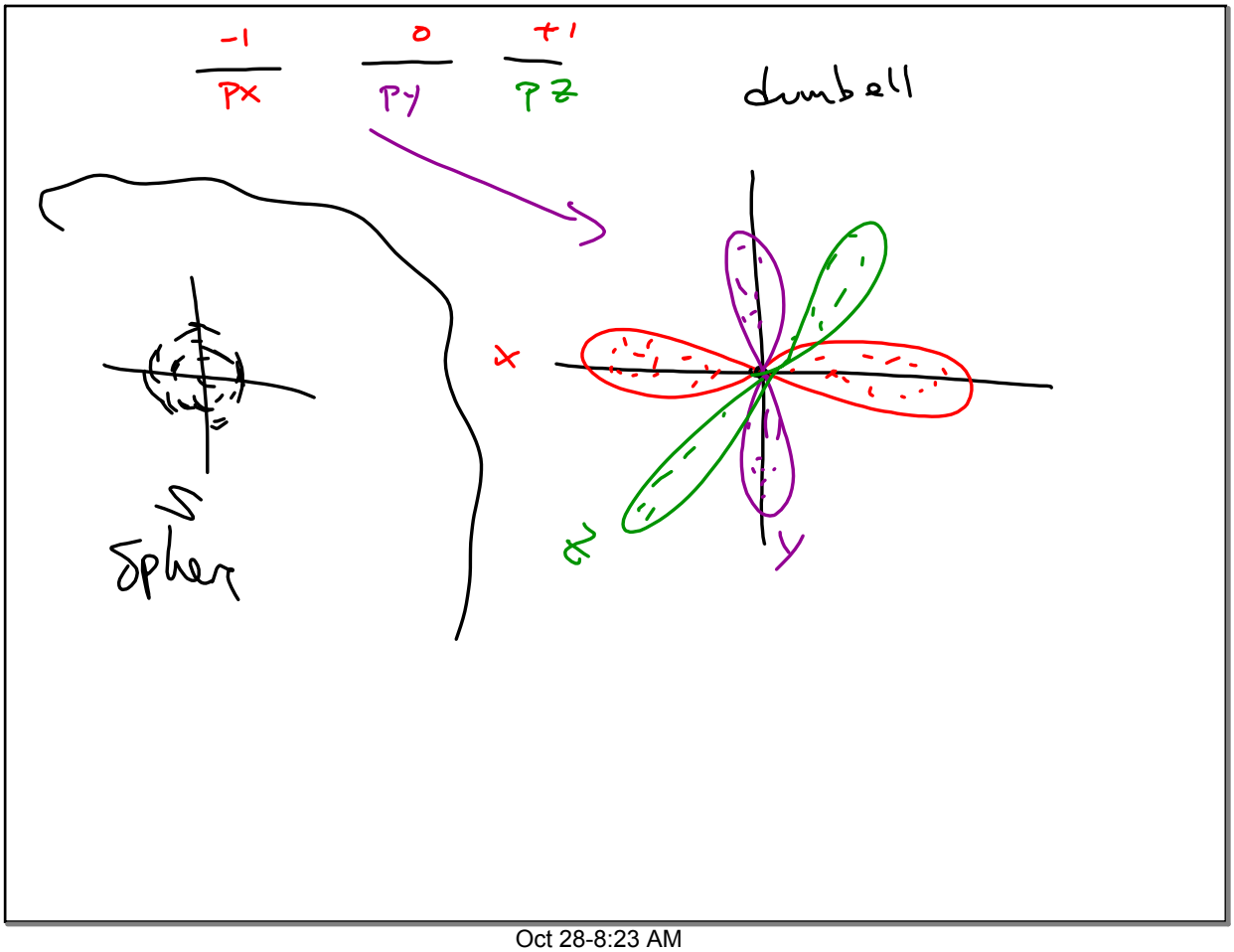
s	p	d	f
0	1	2	3

$(n-1)$ Max

Orientation m_l = $-l$ to $+l$ (orbital, magnetic)

$s = \pm \frac{1}{2}$ Spin

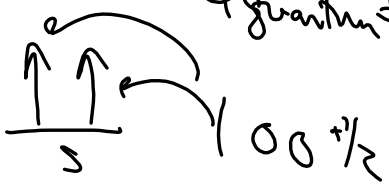
Oct 28-8:18 AM



Oct 28-8:23 AM

Pauli

No 2e⁻ can have the same n, ℓ, m_ℓ, s 4 quantum #'s.



Hund

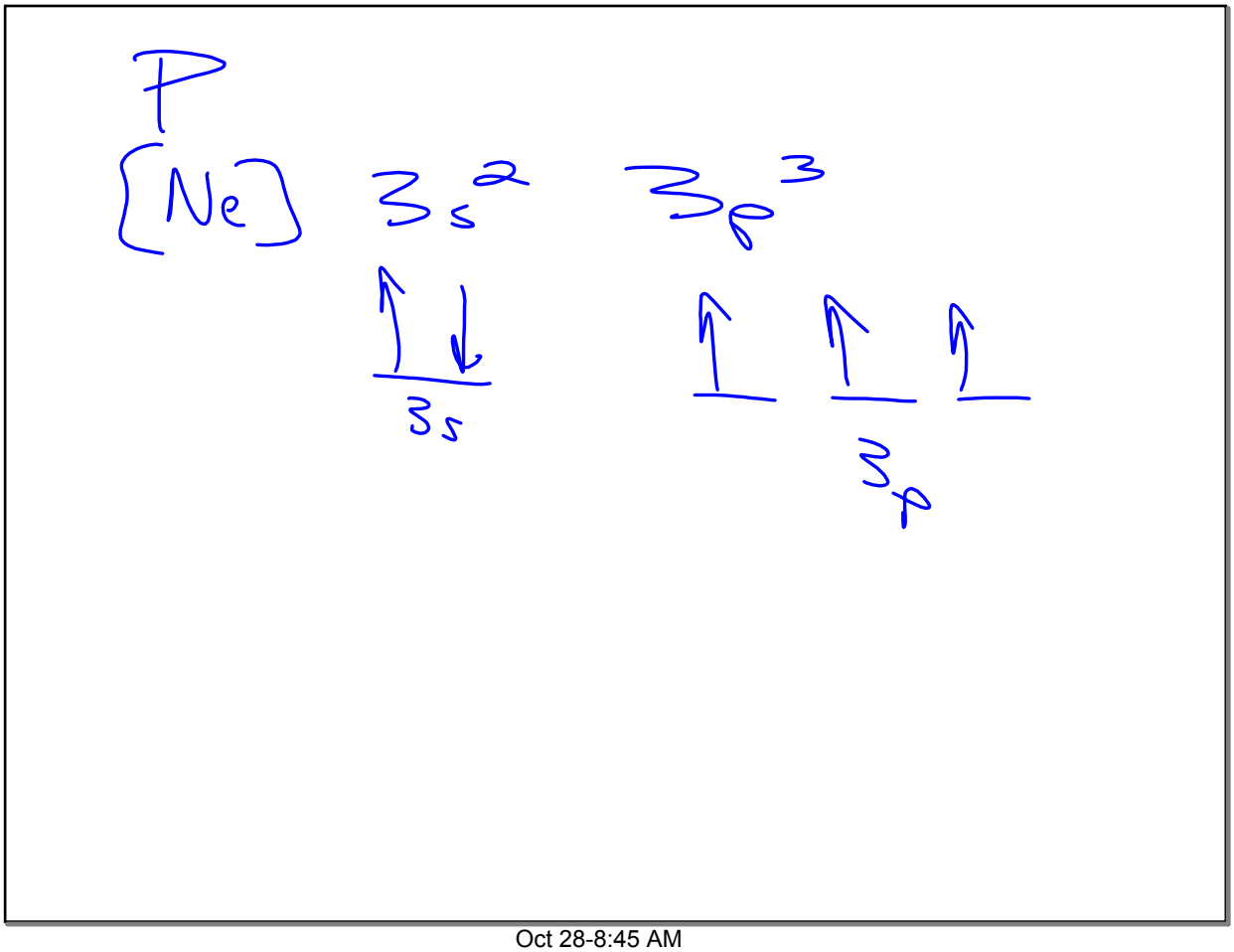
up up up

down, down, down.

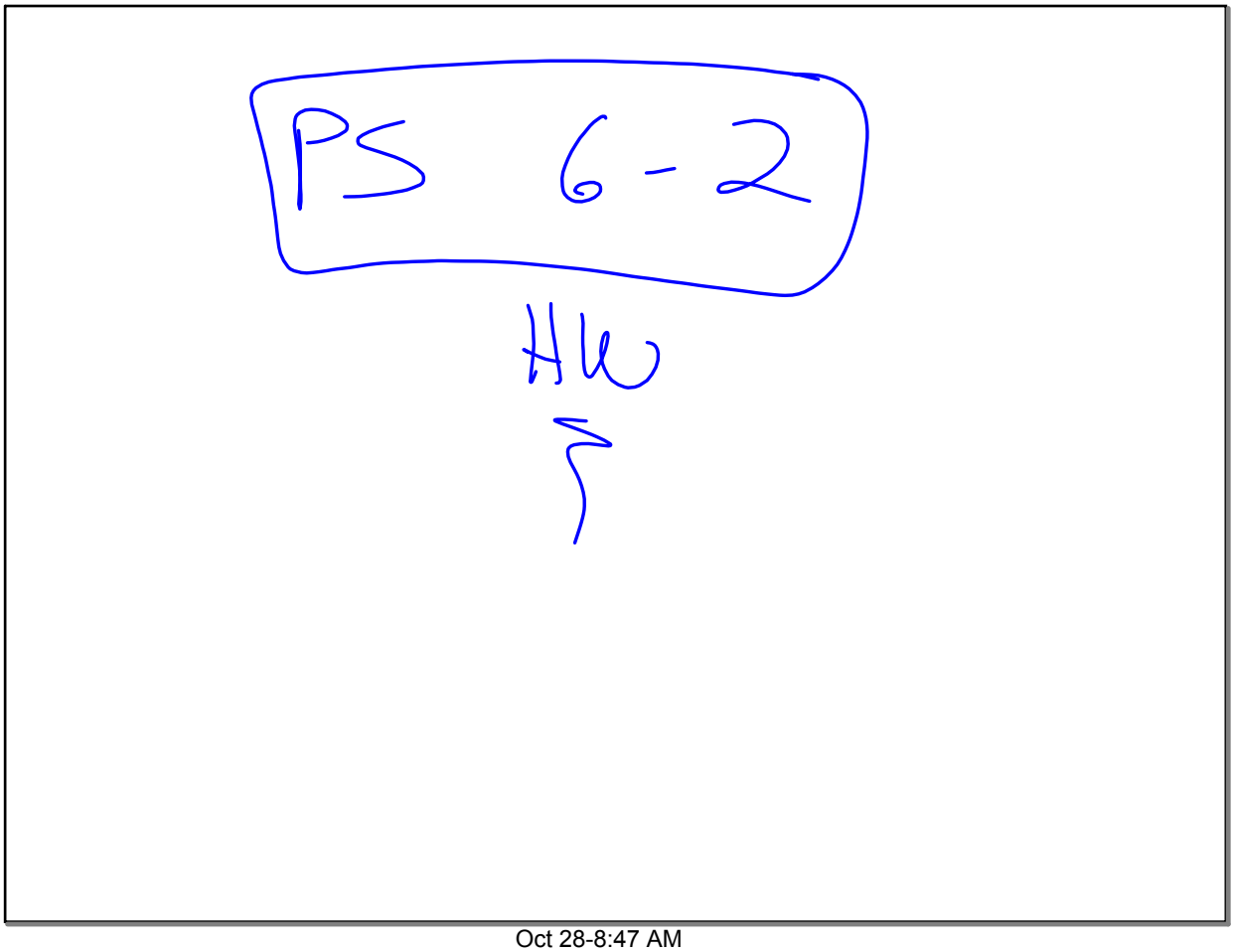
Fill each orbital singularly then double them up.

½ full is somewhat ok

Oct 28-8:27 AM



Oct 28-8:45 AM



Oct 28-8:47 AM