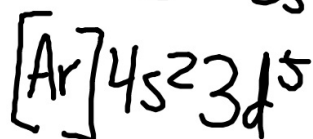
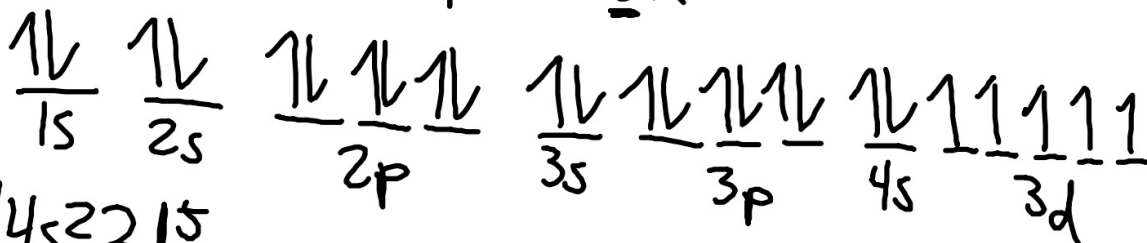
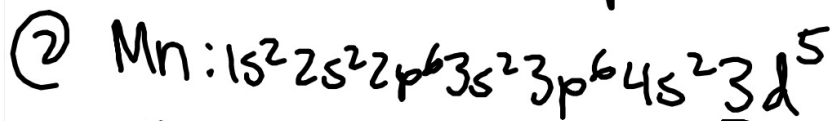
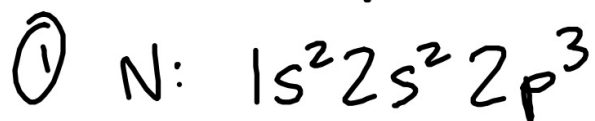
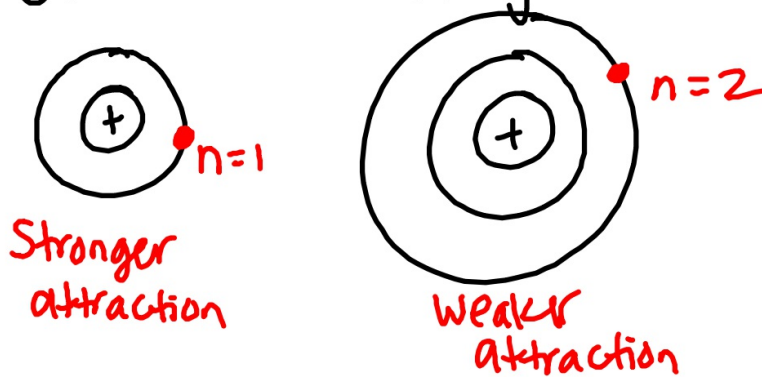


Write the complete e⁻ configuration and draw the orbital diagram.



Coulombic Attraction

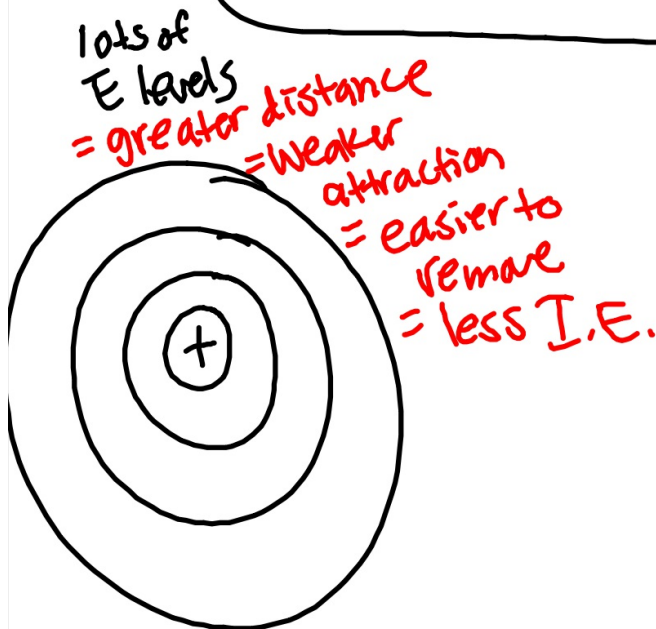
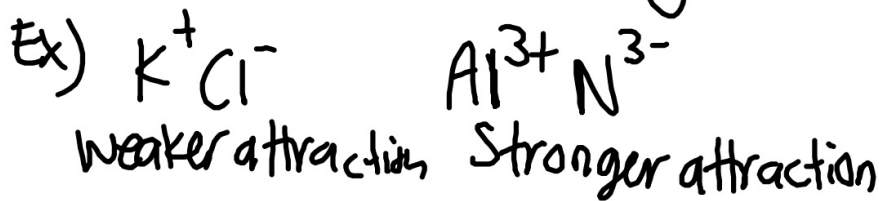
* Short distance = Strong attraction/repulsion (+)(-) (-)(-) or (+)(+)



$$F = k \frac{q_1 q_2}{r^2}$$

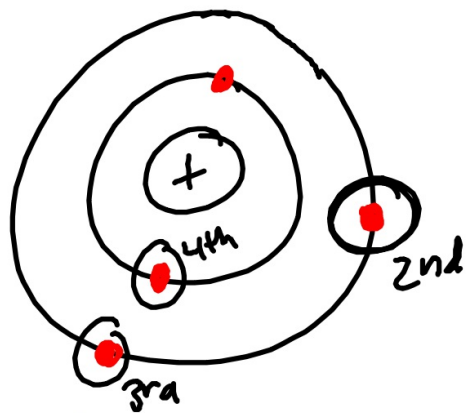
↓ charges
↑ distance

* Higher Magnitude of charge = strong attraction/repulsion



* If different # E levels, then argue distance and how it affects Coulombic attraction.

* If same # E levels, then argue # of p+ (effective nuclear charge)



Boron

1st I.E.

2nd I.E. - E needed
to remove the 2nd
valence e^-

1st I.E. < 2nd I.E. < 3rd I.E.

5pt: $5e^-$ 5pt: $4e^-$ <<< 4th
I.E.