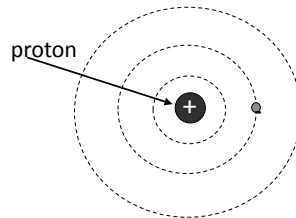
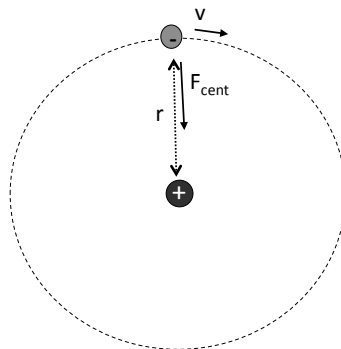


Bohr model of the atom (not quite right)

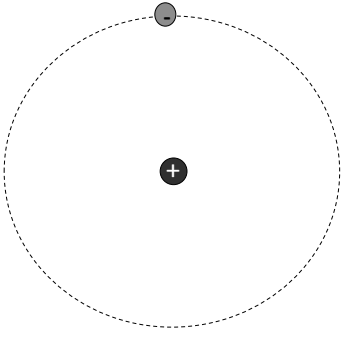


Basic connections between r , v , and energy!



$$F = ma = F_{\text{cent}} = ?$$

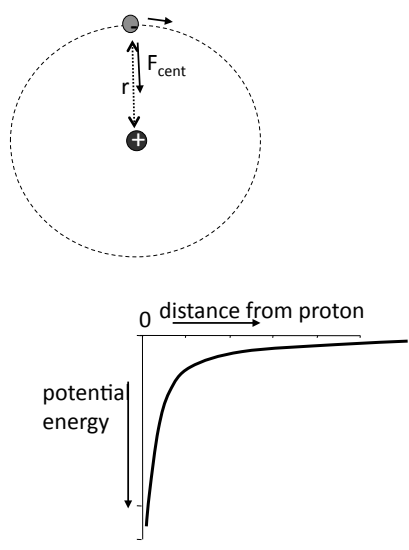
- A) $-mvr$
- B) $-mv^2/r$
- C) $-v^2/r^2$
- D) I don't remember learning anything related to this



The potential energy of the electron is:

- A) $-ke^2/r$
- B) $-ke^2/r^2$
- C) $-ke^2r$
- D) I don't remember

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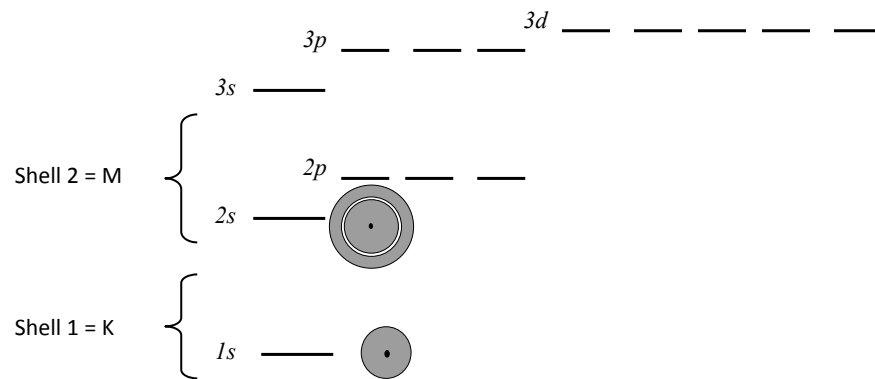
0 distance from proton

potential energy

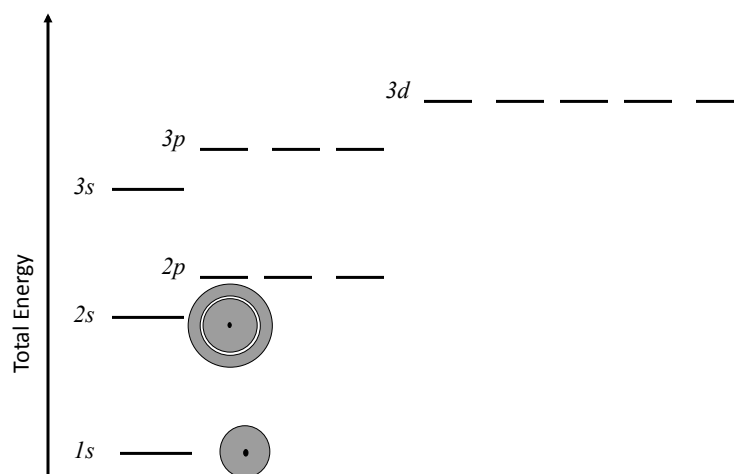
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An electron in the Bohr model of hydrogen atom:

- A) is always at one particular distance from the nucleus
- B) can be at any distance from the nucleus.
- C) is at certain distances from the nucleus corresponding to energy levels it can be in.
- D) must always go into the center where potential energy is lowest.



How do the electrons fit into the available orbitals?



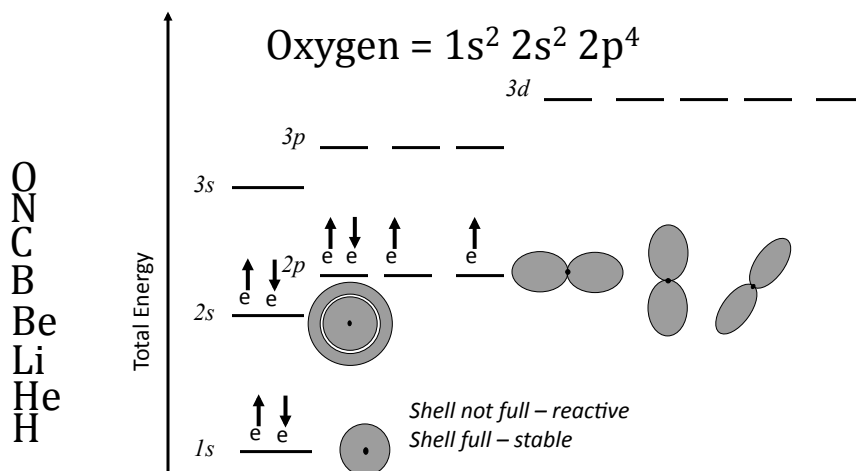
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A brief review of chemistry

Filling orbitals ... lowest to highest energy, 2 e's per orbital



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What is the electronic configuration
of ^{12}Mg ?

A) $1s^2 2s^2 3s^2 4s^2 5s^2 6s^2$

B) $1s^2 2s^2 2p^2 3s^2 3p^2 3d^2$

C) $1s^2 2s^2 2p^6 3s^2$

D) $[\text{Ne}] 3s^2$