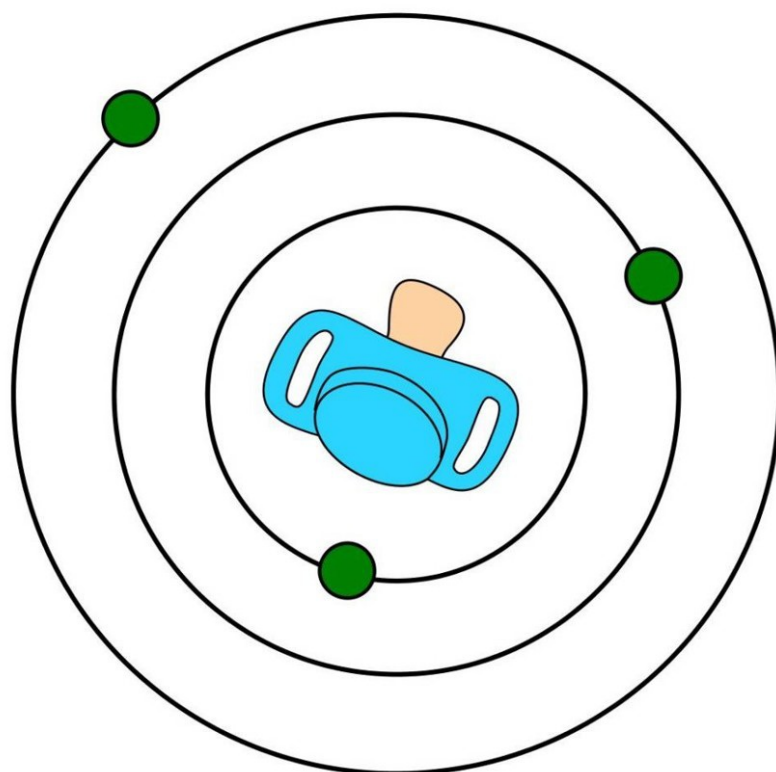
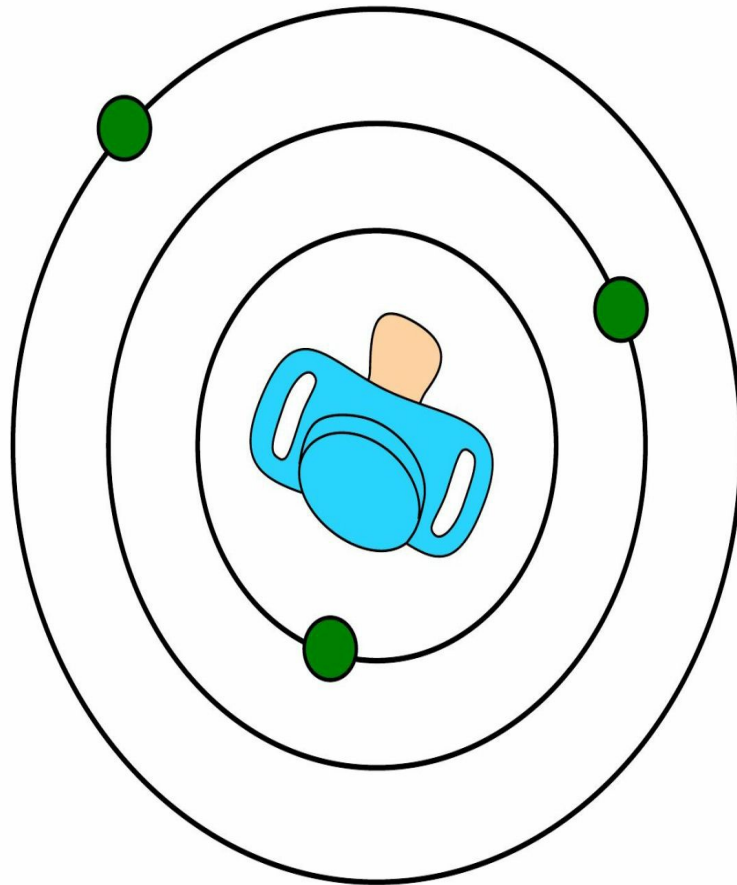


# Quantum Physics for Babies

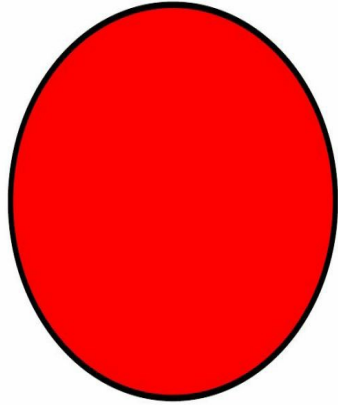


by Chris Ferrie

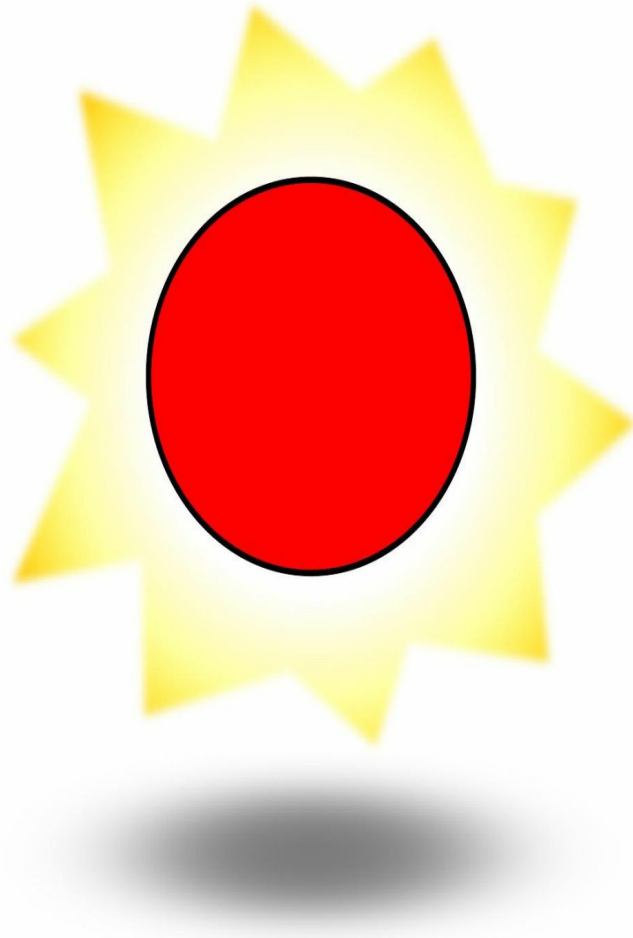
# Quantum Physics



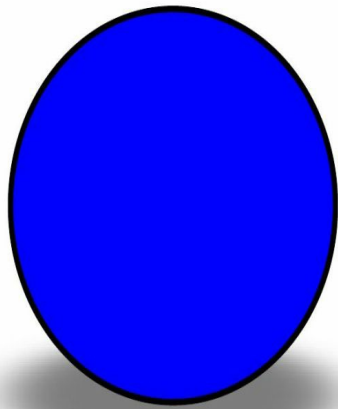
for Babies



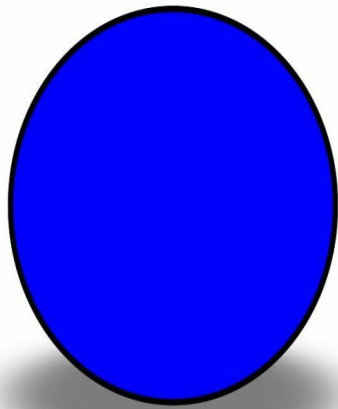
**This is a ball.**



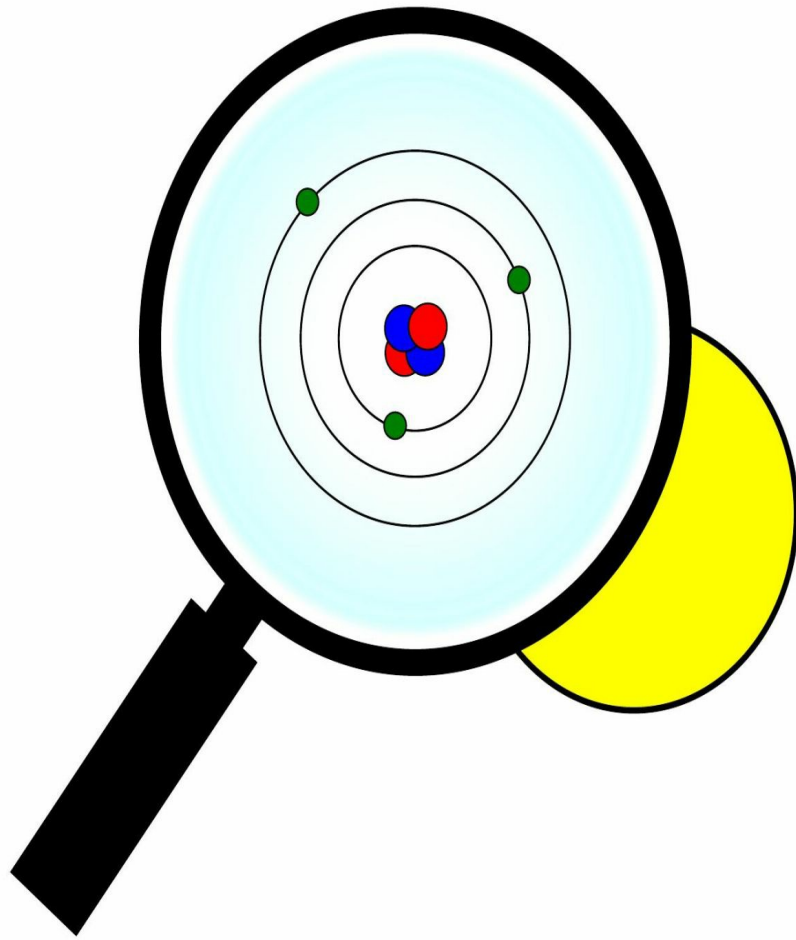
**This ball has energy.**



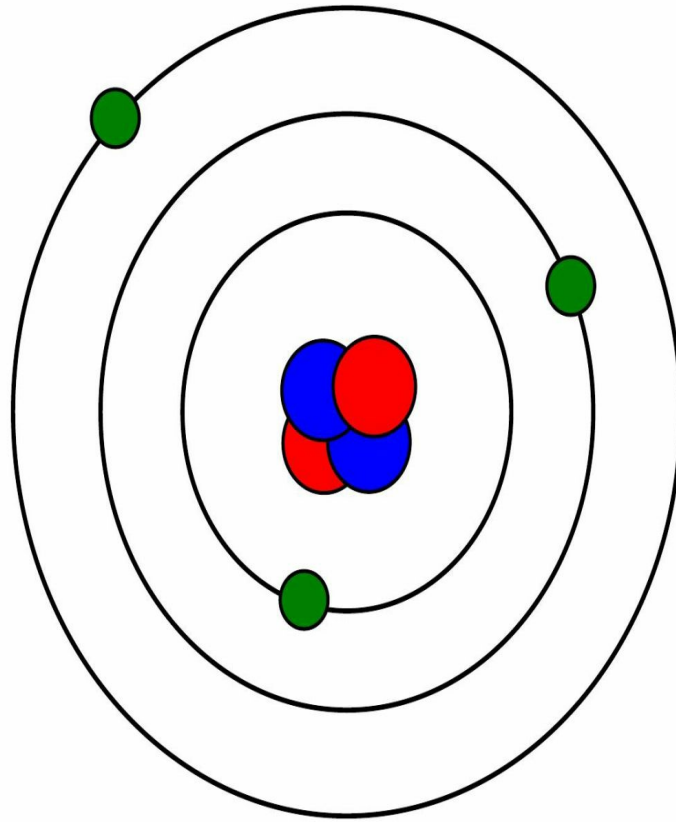
**This is a ball.**



**This ball has  
zero energy.**

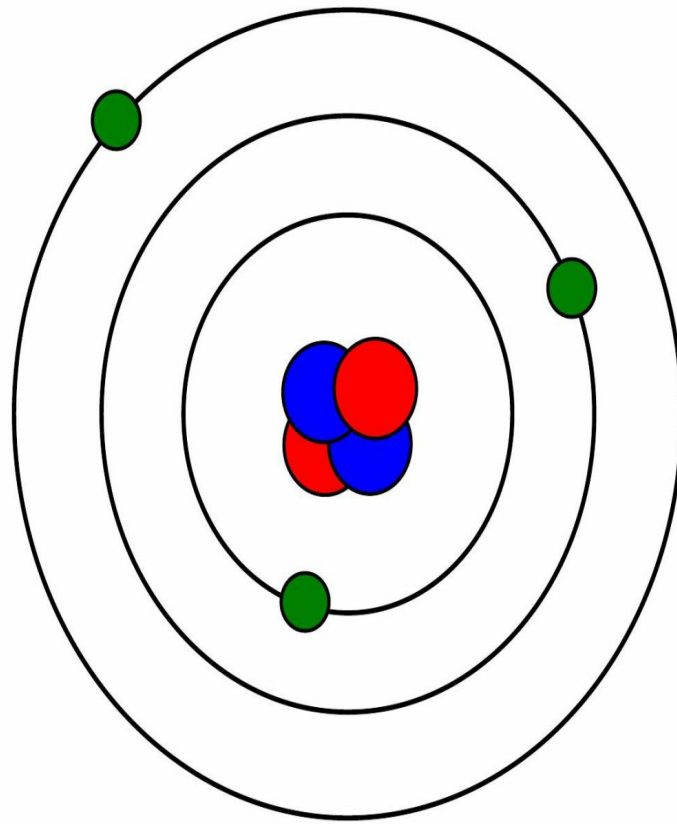


**All balls are made  
of atoms.**

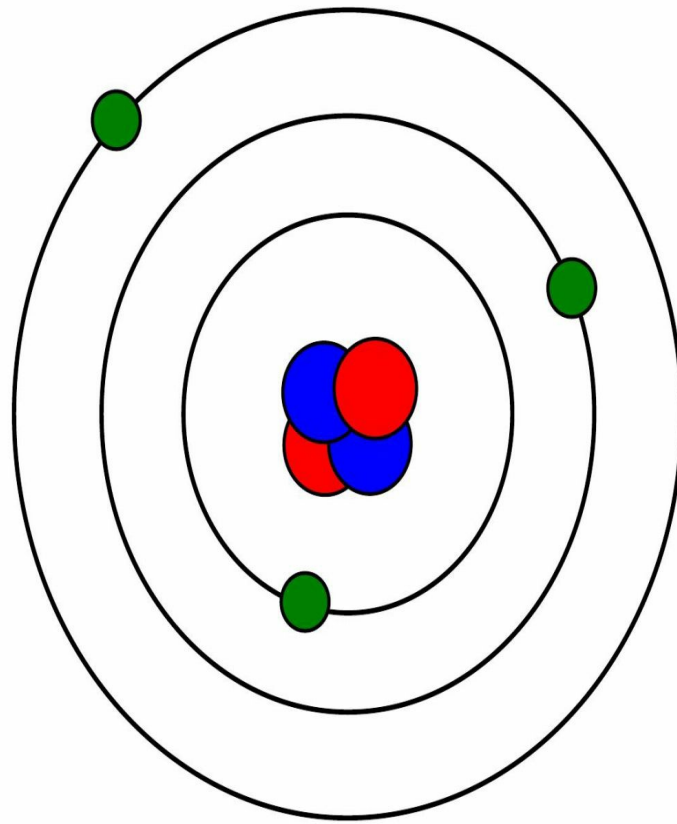


**There are **neutrons**.**

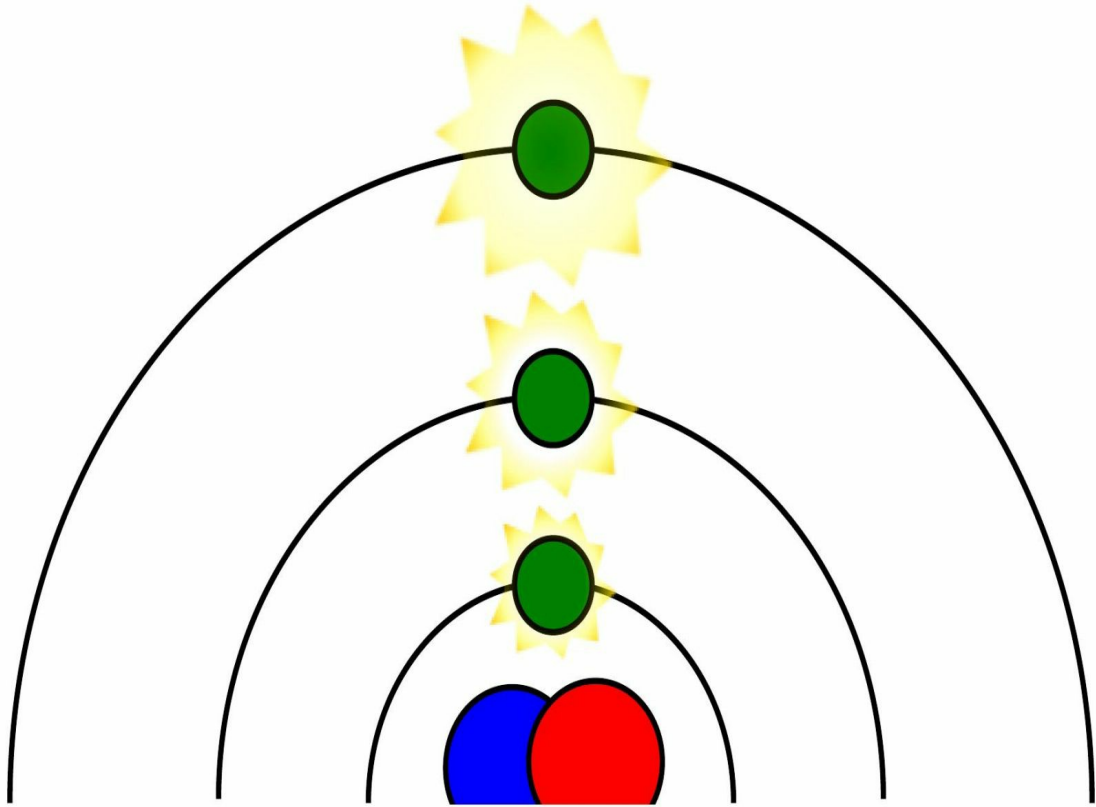




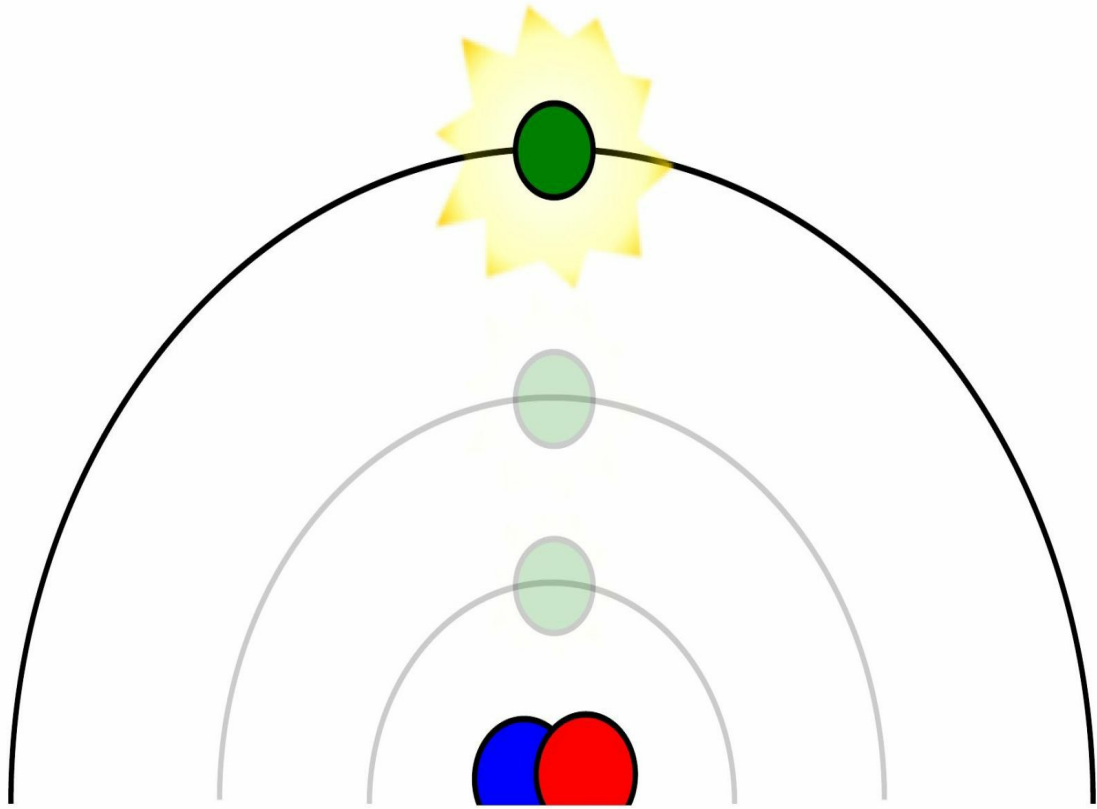
**And protons.**



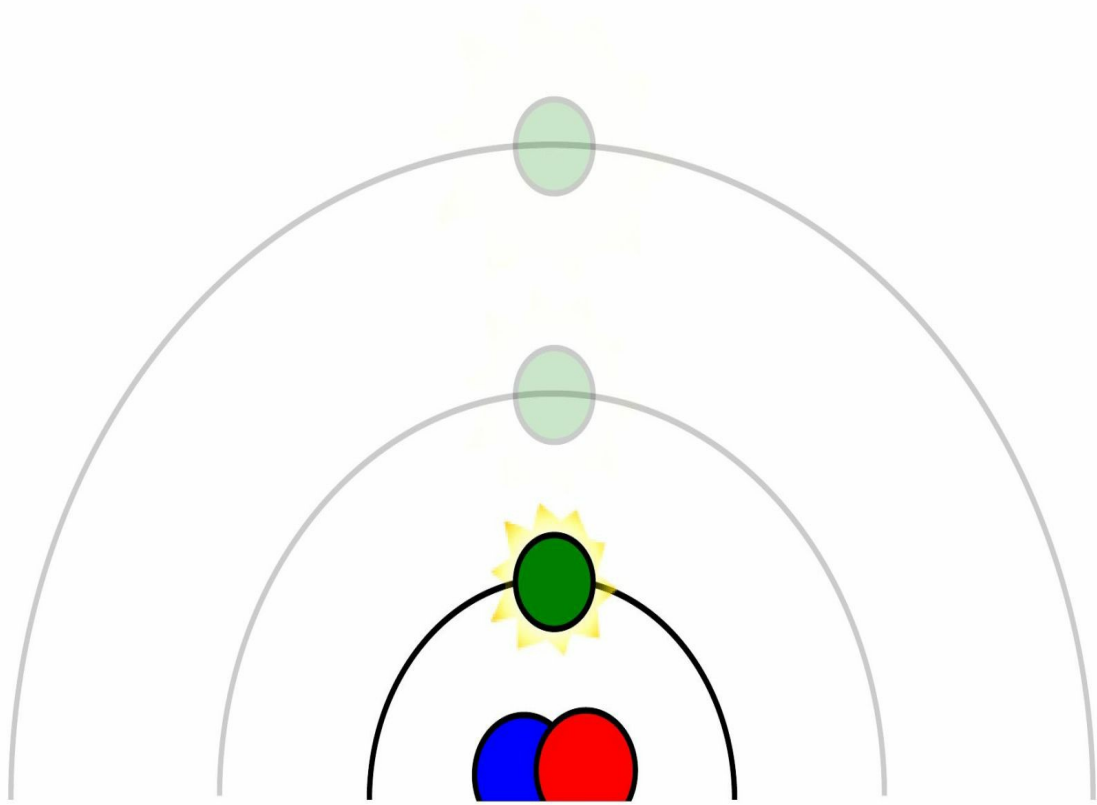
**And electrons.**



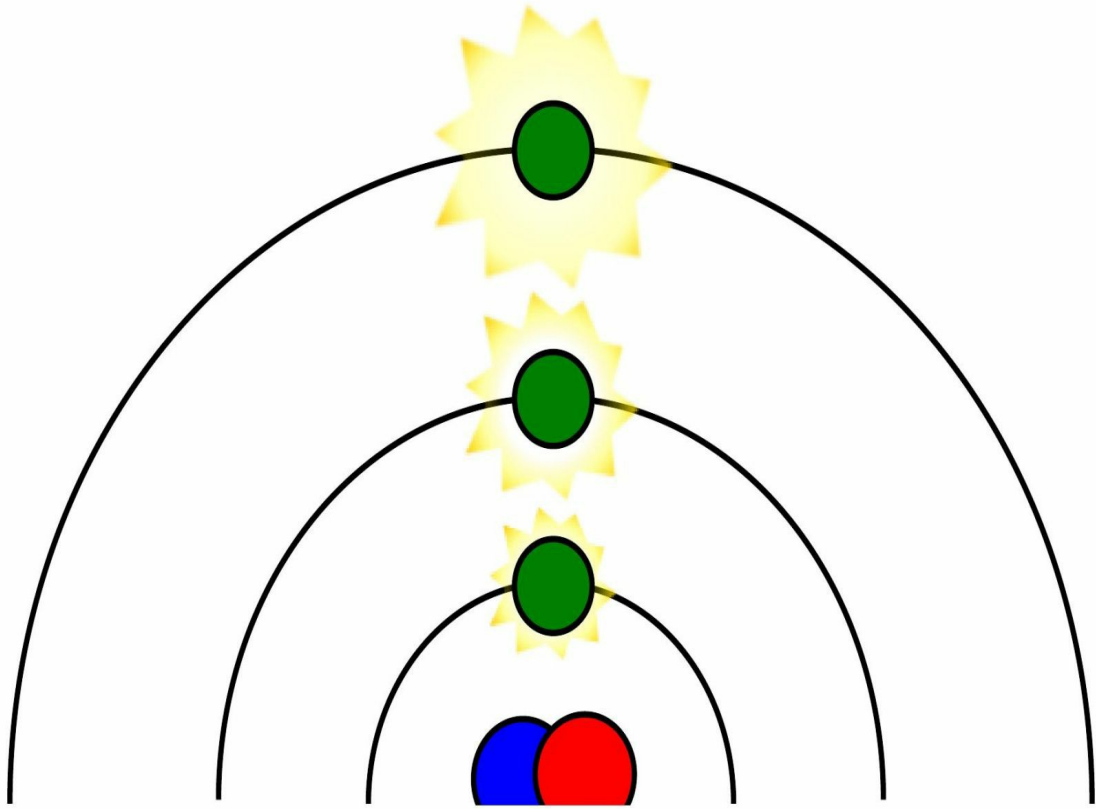
**Electrons have**  
**energy.**



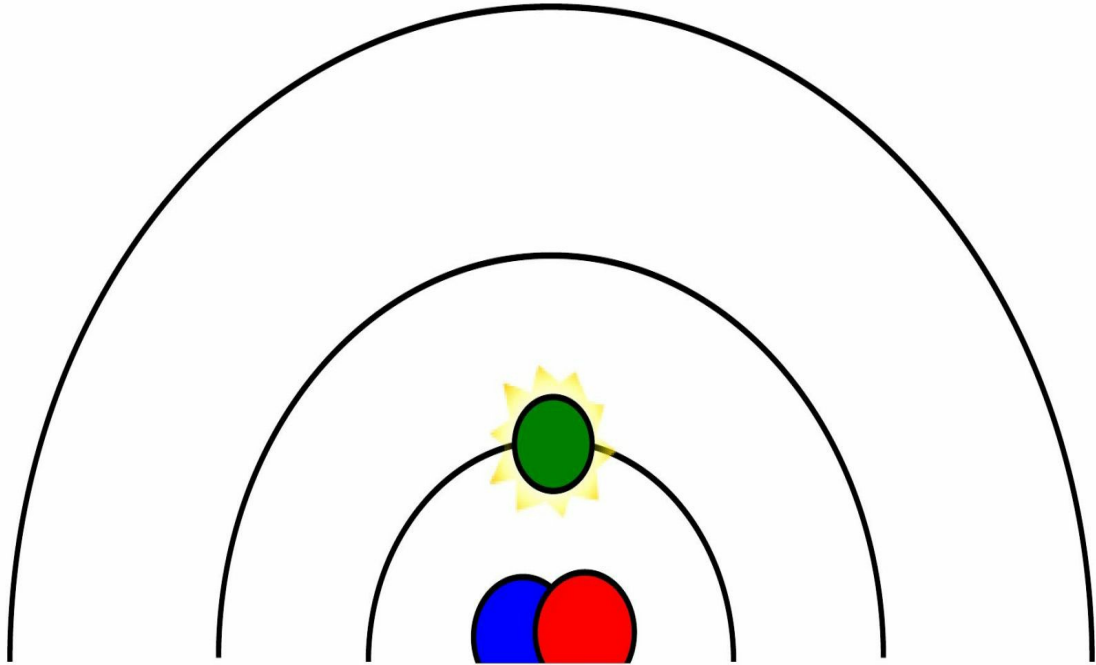
**This electron has  
the most energy.**



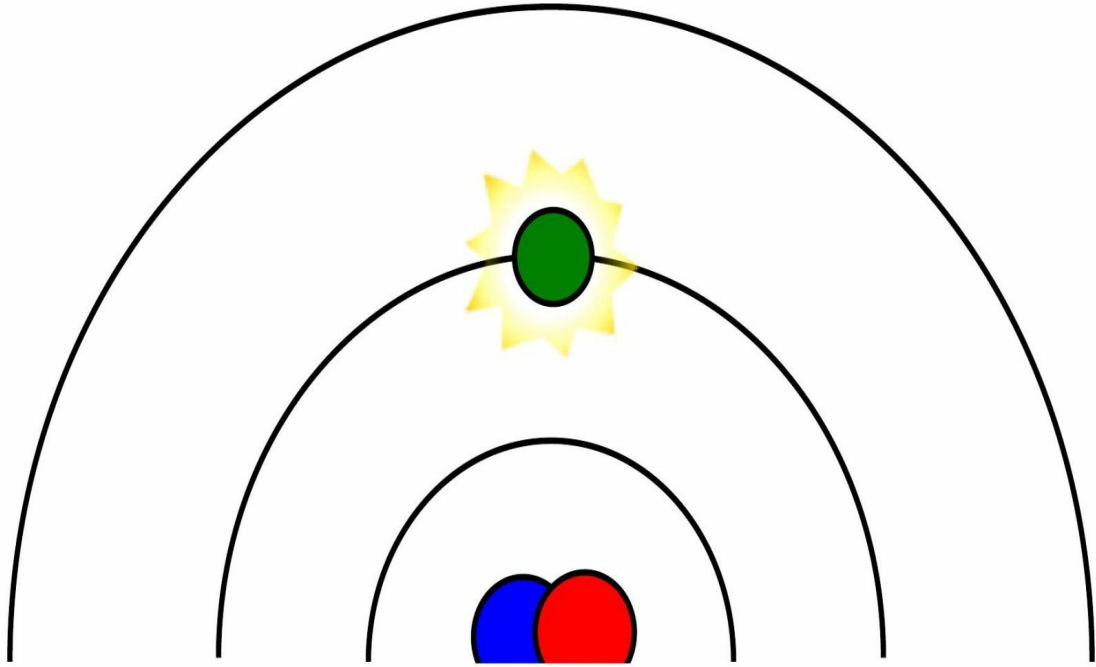
**This electron has  
the least energy.**



**Energy is quantized.**

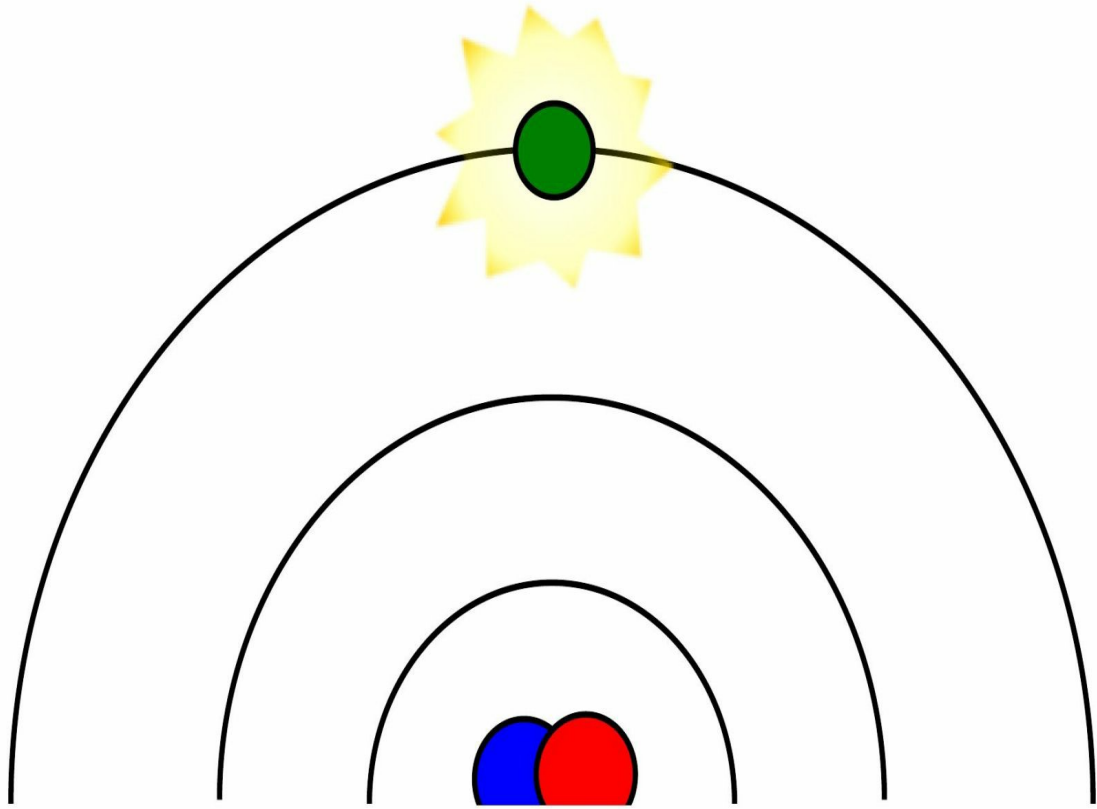


**An electron can  
be here.**

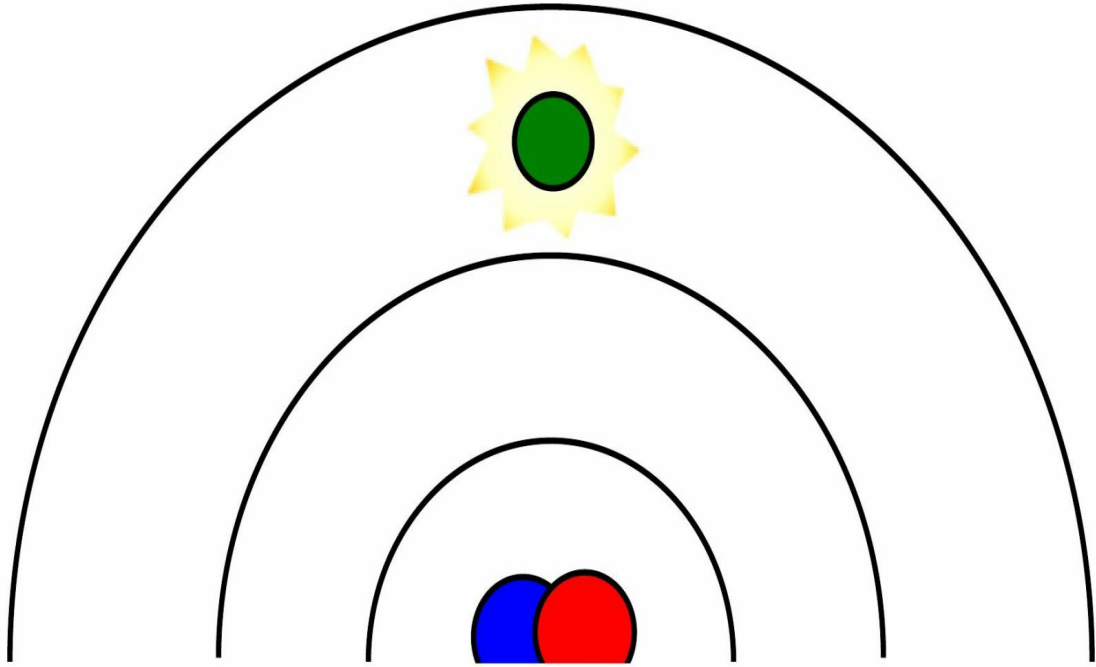


**Or here.**

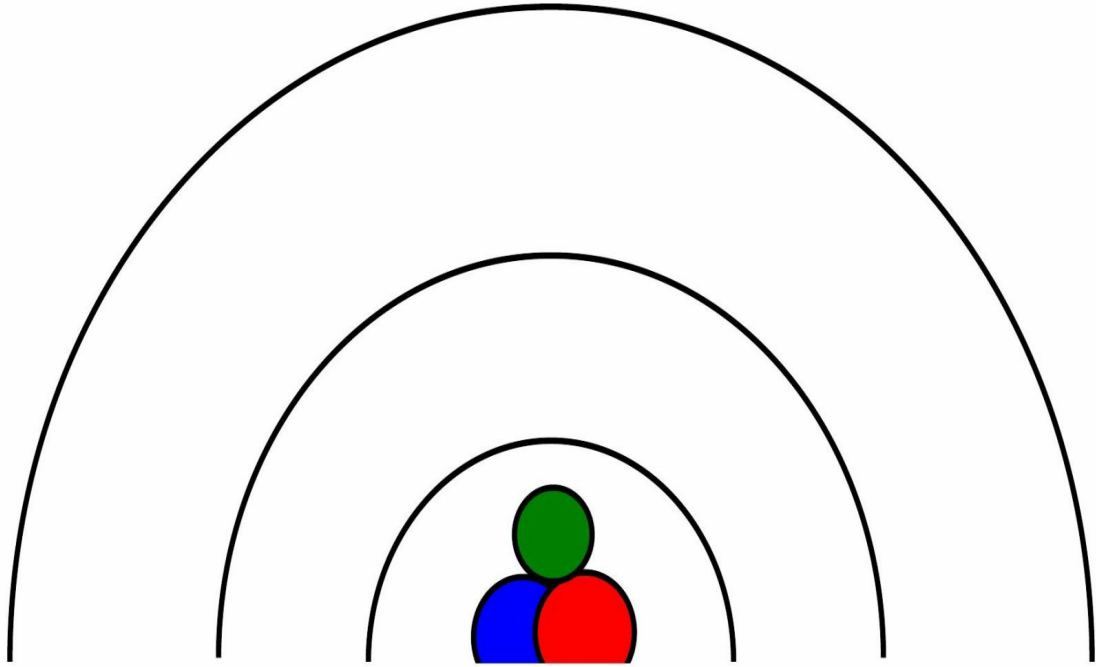




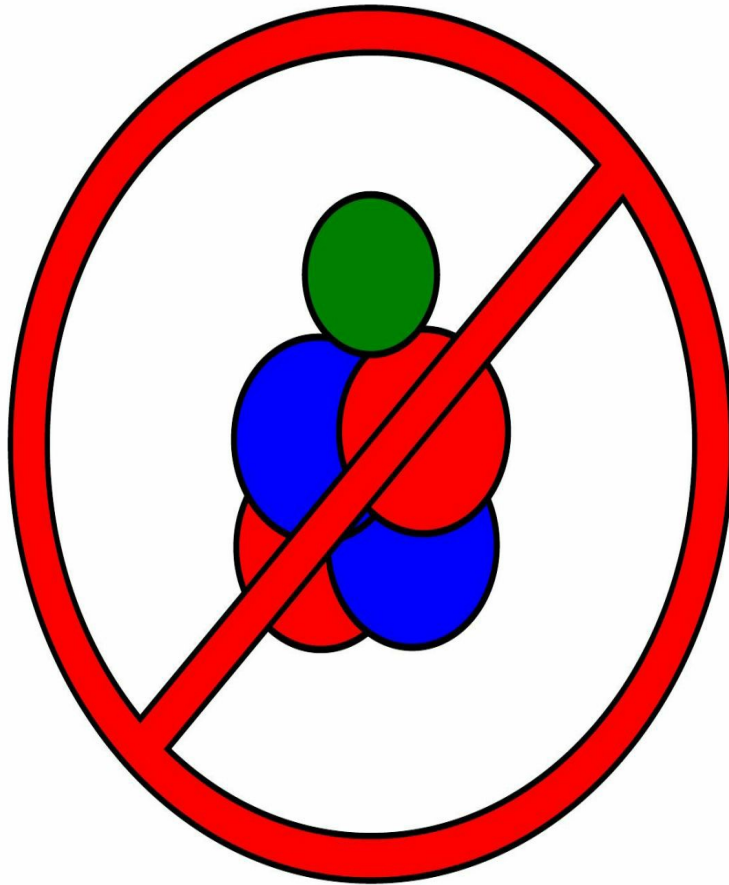
**Or here.**



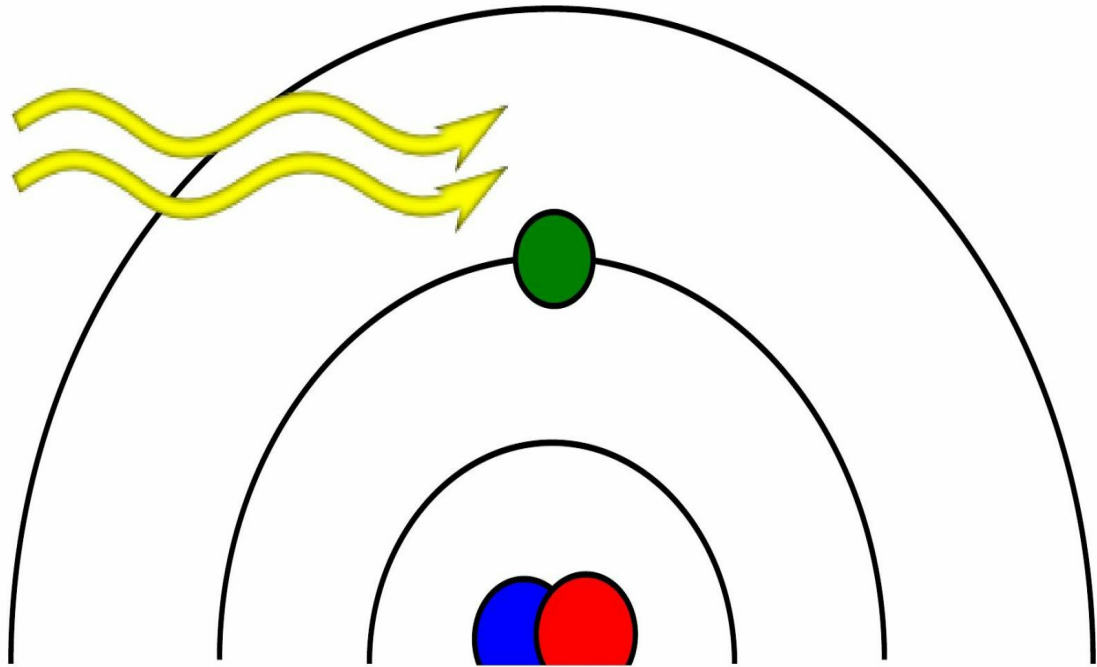
**But not here.**



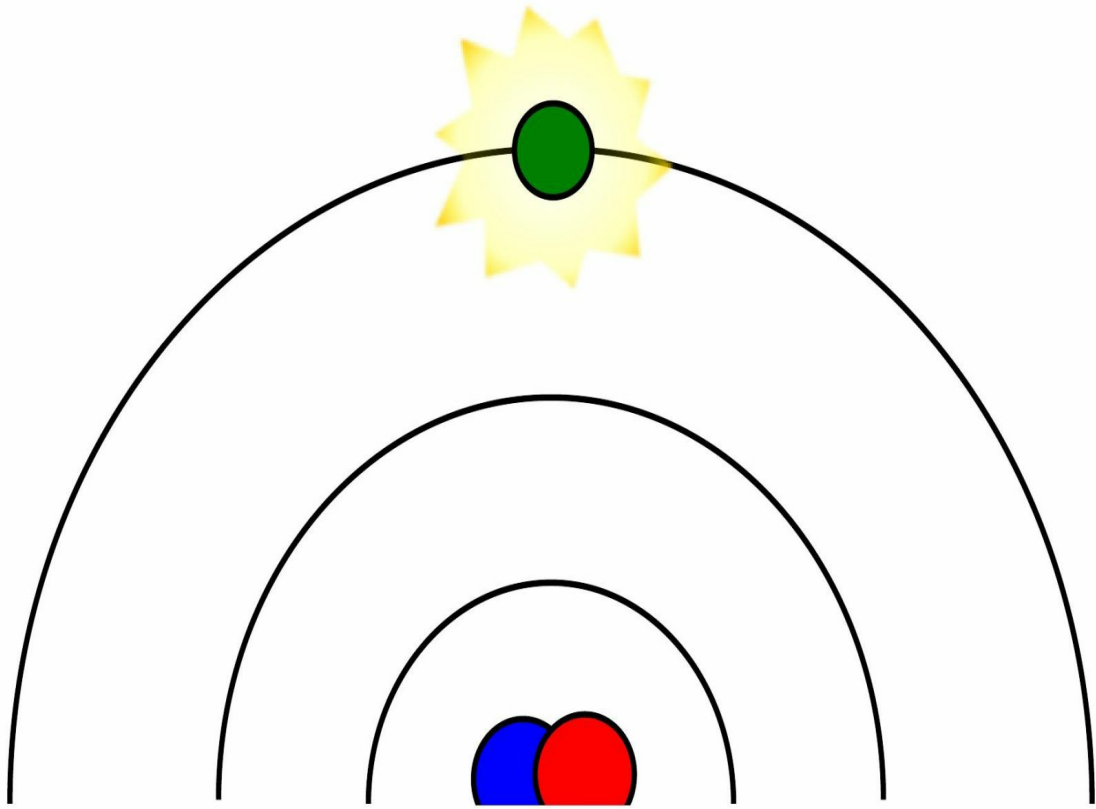
**Or here.**



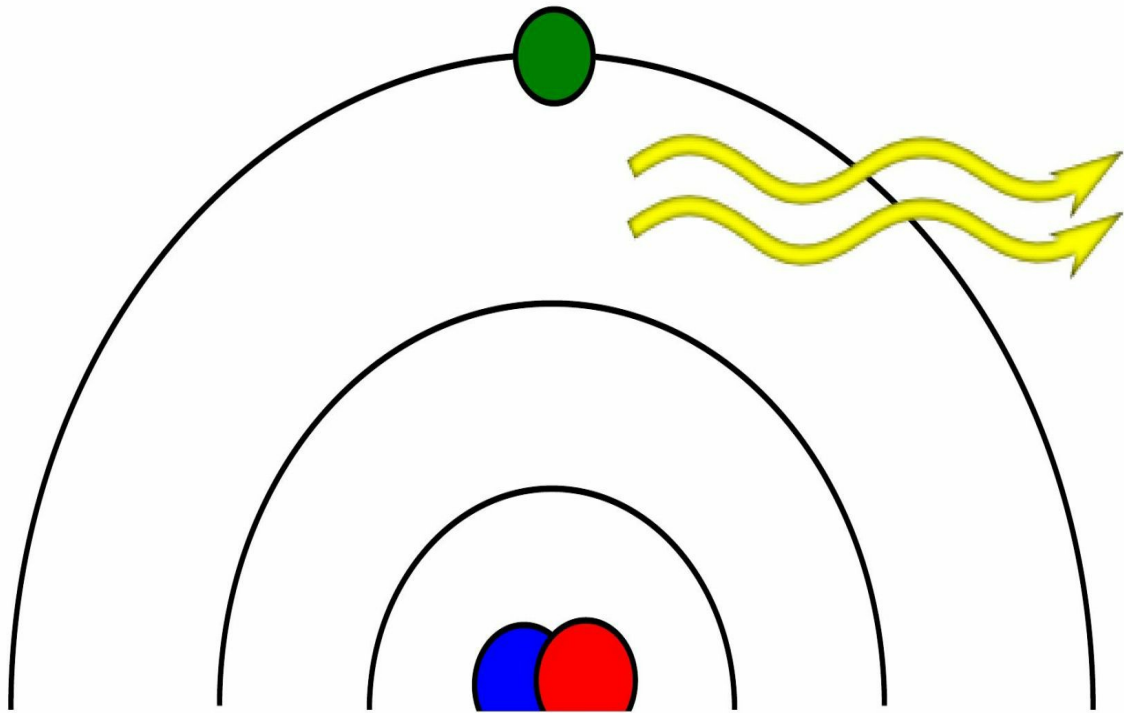
**There are no **electrons**  
with zero energy.**



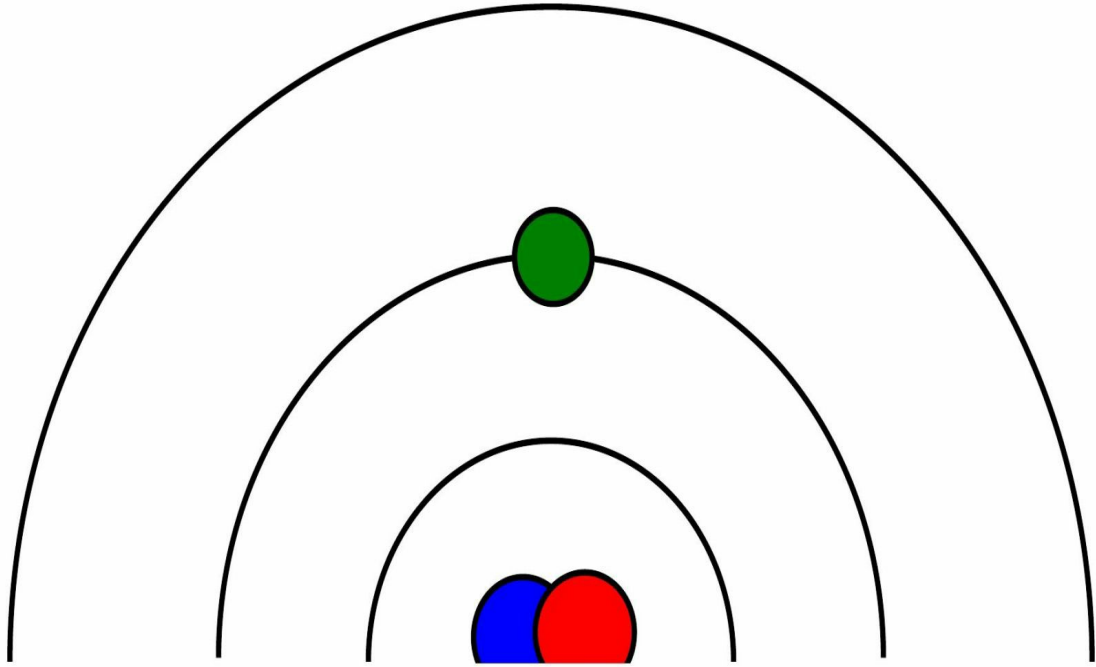
**An electron can  
take energy.**



**To jump up.**

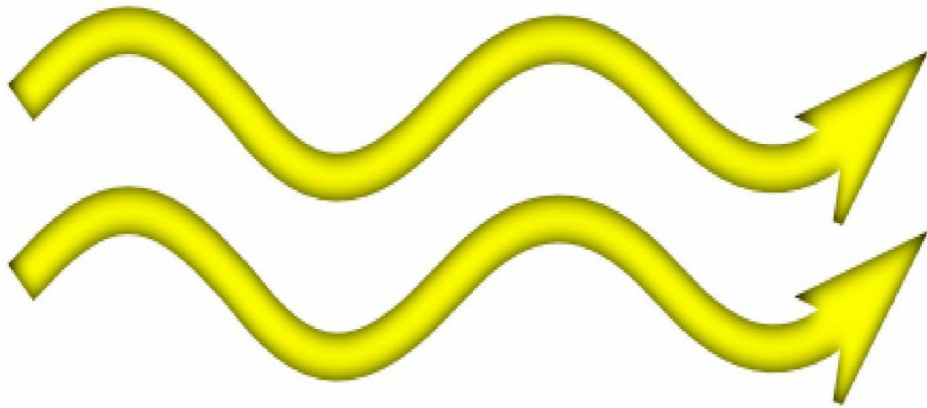


**And must give**  
**energy.**

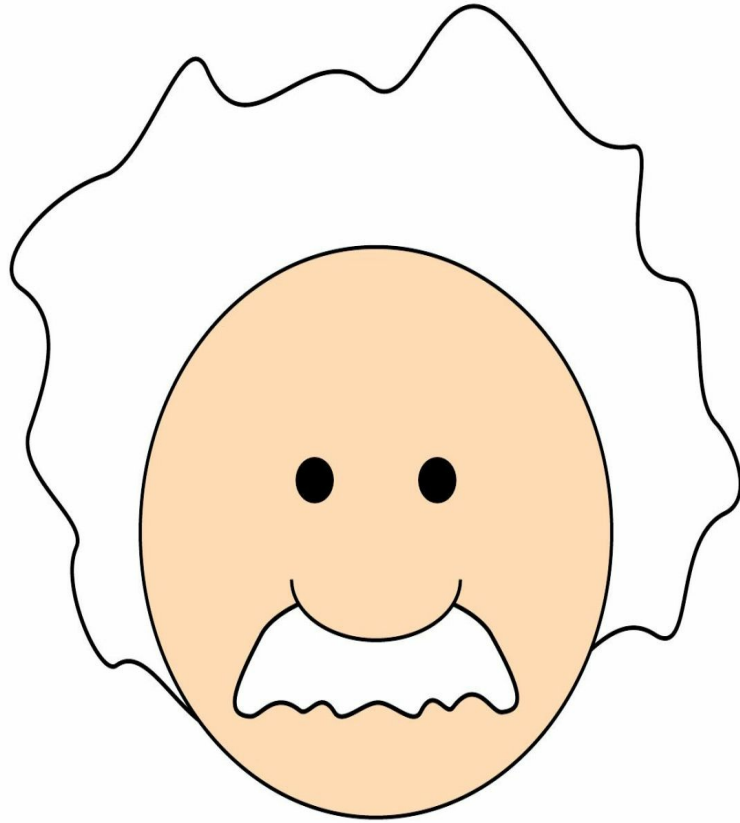


**To fall down.**





**This amount of  
energy is a quanta.**



**Now you are a  
quantum physicist.**