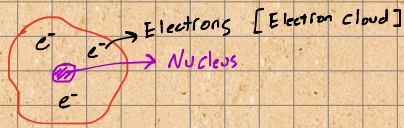
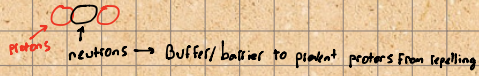


Quantum Mechanical Model [Electron Cloud Model]: Erwin Schrödinger [1926]



★ Electrons held together by nuclear force



$\boxed{\overset{6}{C}}$ → Atomic # = # of protons

$\boxed{12.01}$ → Atomic Mass = Mass #

↳ Mass = protons + neutrons

★ Not all atoms of the same element are alike

↳ Same # of protons but they can have a different # of neutrons

↳ Isotopes!

Symbol	Atomic #	# protons	# neutrons	Mass #	Name
$^{12}_6\text{C}$	6	6	6	12	Carbon-12
$^{14}_6\text{C}$	6	6	8	14	Carbon-14

★ Mass measured in AMU's: Atomic Mass Units

↳ 1 AMU = $\frac{1}{12}$ the mass of a carbon-12 atom

Symbol	Atomic #	# protons	# neutrons	Mass #	Name
N			8		
S			16		
U			143		