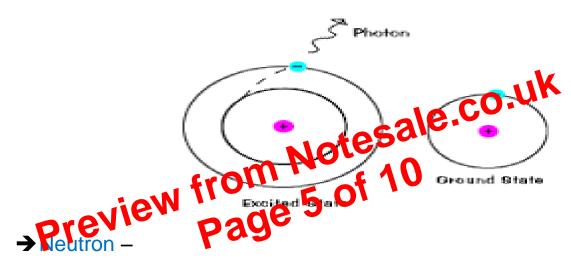
➤ While revolving, electron can neither

loose energy or gain energy. The atom is stable and do not collapse. This state is known as ground state.

> Energy is lost or gain by an electron only

when it jumps from one orbit to the another. The atom is then said to be in the excited state.



In 1932, James Chadwick confirmed the existence of neutron in the nucleus.

He bombarded the nuclei of some light elements (Boron, Beryllium) with fast moving alpha particles. He found that some neutral particles were ejected from the nucleus which carried no charge but had a mass nearly equal to that of proton (1.67*x 10^-27 kg)

Mass of electron = $9.11x10^{-31}$

Mass of proton = 1.673×10^{-27}

Mass of neutron = 1.675×10^{-27}