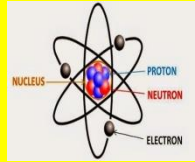






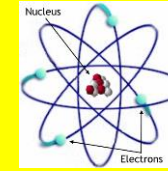
Basic building block of matter

### Atom



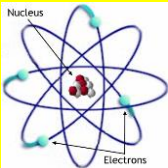
Negative sub atomic particle

### Electron



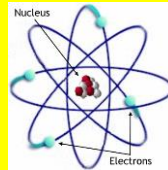
Positive sub atomic particle

### Proton



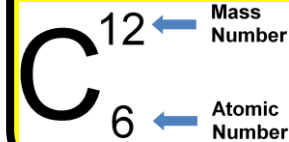
Uncharged sub atomic particle

### Neutron



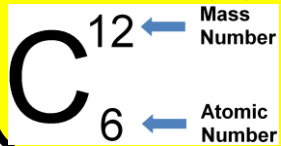
Number of protons in the nucleus

### Atomic number (Z)



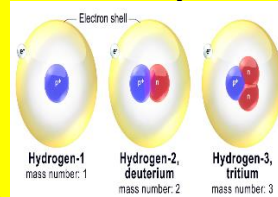
Number of protons and neutrons

### Mass number (A)



Two atoms of same element contain same number of protons but different number of neutrons

### Isotopes



Unstable isotopes that throw out particles to be stable

### Radioisotopes



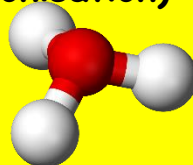
Amount of radiation around us coming from rocks and sun's rays

### Background radiation



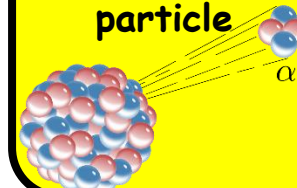
When radiation hits an atom an electron escapes atom leaving it positive

### Ion (Ionisation)



A highly energetic helium nucleus with 2 protons and 2 neutrons

### Alpha particle



A highly energetic electron

Beta  
particle

$\beta$

Radiation  
from the  
electroma  
gnetic  
spectrum

Gamma  
radiation

$\gamma$

Radiation  
that can be  
stopped by a  
sheet of  
paper

Alpha  
radiation

$\alpha$

Radiation  
that can be  
stopped by  
an aluminium  
sheet

Beta  
radiation

$\beta$

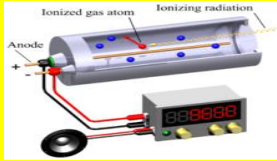
Radiation  
that can be  
stopped by  
10 cm of  
lead

Gamma  
radiation

$\gamma$

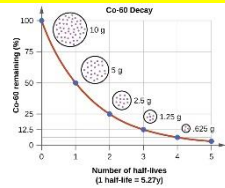
Instrument  
that  
detects  
radiation

Geiger Muller  
tube



The time it  
takes for  
half the  
radiative  
particles to  
decay

Half Life



Finish  
Game