

Structure of Atom

- Thomson's model
- Rutherford's model
- Bohr's model of atom
- Newtson
- valency
- Atomic no & Atomic mass
- Isotopes & Isobars

Matter \rightarrow Smallest particle \rightarrow atom

Dalton's Atomic Theory

189.5 \rightarrow balloon \rightarrow dam
Magnets $N \leftarrow S$
 $N \leftarrow N$

Plastic comb - charged body

Atom is indivisible

Charges

Plastic comb - matter - atoms.

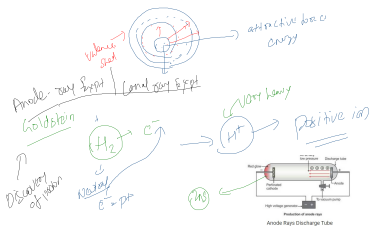
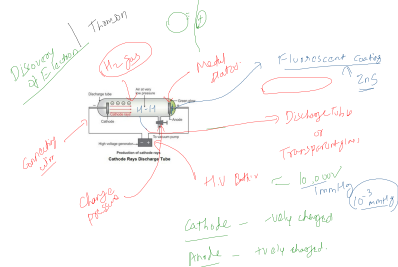
Atom \rightarrow Neutral
 $e^- = p^+$

\uparrow
atom is divisible

Hair \rightarrow matter $e^- = p^-$

Balloon $\rightarrow e^- = p^-$

↳ Initially network ~~affected~~ ^{affected} - valy changed.



charge unit - Coulomb

$$\left. \begin{matrix} e^- & e^- & \tau^- \\ p^+ & \cdot & \tau^+ \end{matrix} \right\} \text{charges}$$

Thomson's Atomic Model

✓ It had been well established that atoms

Contains -vely charged particles (i.e. electrons)

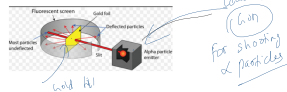
2. to maintain electrical neutrality of the atom, positive charges were also present within the atom.

Q5) How these -ve charges & positive charges are distributed within the atom.

J.J. Thomson, in 1904, proposed that an atom was a sphere of +ve electricity in which were embedded no. of electrons sufficient to neutralize the +ve charge.

plum pudding

Rutherford Model of atom / Gold-foil experiment



α -particles \rightarrow charged particles

particles

It loses an e^- — fully char
Gains an e^- — really charged

$$\text{He} \rightarrow \textcircled{2}$$
