

Entry #18 4.2 wrap up notes

Wrap-up of Activity 4.2

Discovery of electron

- J.J. Thompson did experiments in 1897 because he thought atoms might be made of even smaller particles
- Cathode ray particles have a negative charge, we now know are called electrons

Evidence to support:

- Cathode ray particles moved towards positive (+) electrodes, and away from negative (-) electrodes
- mass mass an object has, the harder it is to deflect (repel)
 - Cathode particle has low mass, easier to deflect
 - Charged atoms (Hydrogen → Carbon have more mass and are harder to deflect)
- Thompson concluded the cathode ray particles were smaller and had less mass than an atom

Plum Pudding Model

- Presented in 1904
- Based off J.J. Thompsons experiments done in 1897
- Stated there's a positive "pudding" with negative "plums" randomly inside

Plum Pudding Model of the Atom

Blue haze of positive electric charge—the "pudding."

(Note: The cross represents a "plus" sign.)

Pink negative electrons—the "plums"—contained in the positive pudding.

