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| Science 9 | Unit B  |
| Lesson 3: The Atomic Model | 84 Mins |

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| **Atomic Theory****Billiard Ball Model**All matter is made up of **elements**Elements are made up of AtomsAll atoms of an elements have the same mass.**Cathode Rays**The rays in a cathode tube were found out to have a charge.These particles turned out to be Electrons.**Raisin Bun Model**A positive atom (bun) has negative electrons in it (raisins)**Solar Model**Electrons orbit around a large positive atom**Gold Foil Experiment** To prove Hantaro Model, Rutherford shot alpha particles (Positive Particles) The Nucleus is small and positively charged, orbited by electrons**Bohr’s Model**Electrons have specific orbits called shells. Electrons can ‘jump’ and ‘fall’ from these orbits by gaining or releasing energy.**Discovery of the Neutron**Nucleus made up of:* Protons (Positive)
* Neutrons (Neutral)
* Electrons (Negative)
 | John Dalton 1808 (English)All Oxygens are the same mass and that is different from ChlorineJJ Thomson 1897 (English)https://www.youtube.com/watch?v=O9GoyscbazkThomson(Draw the Model)Hantaro Nagaoka (1904) (Japanese)(Draw the Model)Ernest Rutherford (1908) (Canadian)Draw the Experiment and new Model (pg. 119)Neils Bohr (1913) (Danish)Draw pg. 120James Chadwick (Enlish) |