

The Atomic Models - What were the major discoveries that each of the following atomic models represented in its day?

Label 2-3 key features in each diagram.

John Dalton ----- J.J. Thomson ----- Ernest Rutherford ----- Niels Bohr ----- James Chadwick

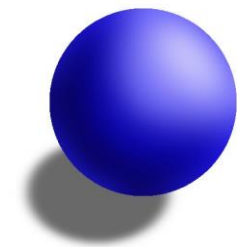
1766 -1844

Late 1800s

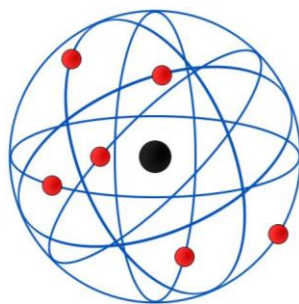
1871-1937

Early 1900s

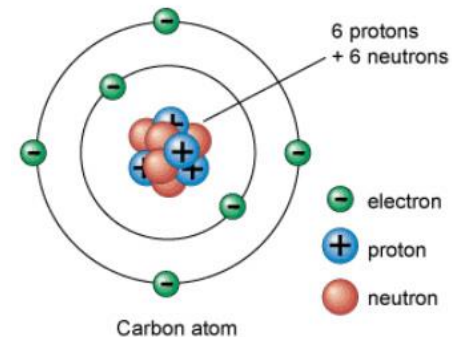
1921-1935



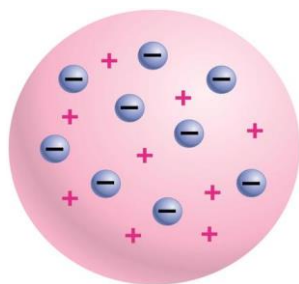
Dalton identifies for the first time specific elements by atomic mass - hydrogen, oxygen, nitrogen, sulfur, phosphorus and carbon



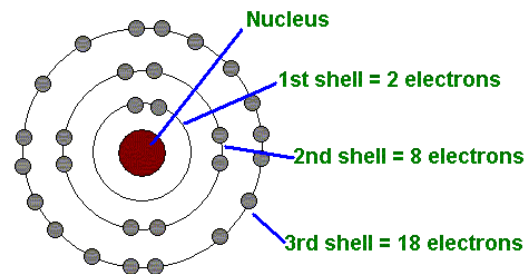
The nucleus is discovered. The atom is found to be mostly empty space. The nucleus is discovered to be an extremely small dense and positively charged region.



The remaining unexplained mass of the atom is explained with the discovery of the neutron.



The atom is found to be divisible, not indivisible as had long been thought. The electron is identified as a discrete part of the atom with negative electric charge.



Electron levels and quantum theory are adopted to explain the structure of the atom. The proton becomes a well-defined particle in its own right.

Name _____

per _____

date _____

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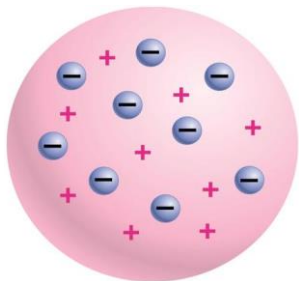
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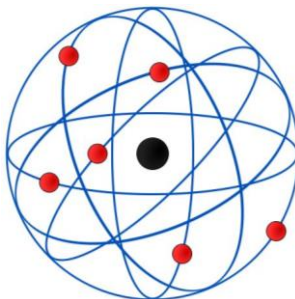
John Dalton
1766 -1844



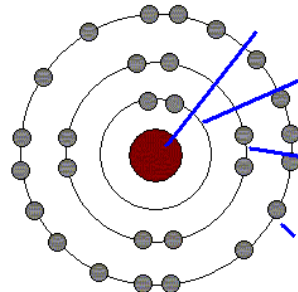
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