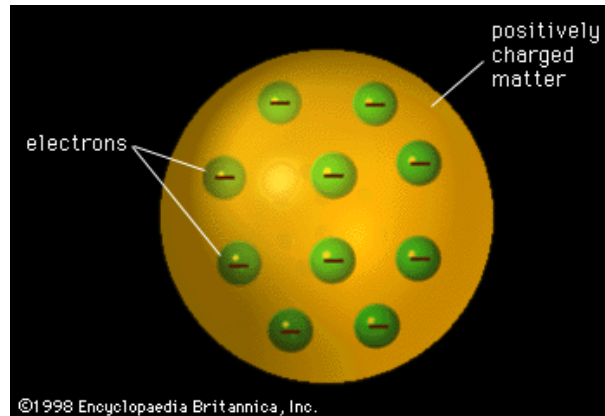


ATOMIC MODELS

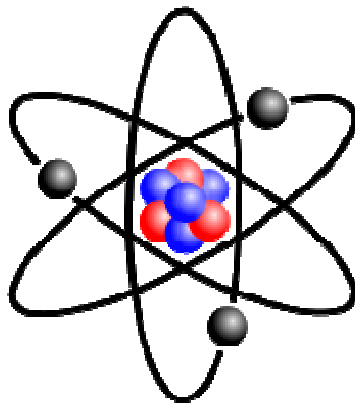
Thomson “Plum-Pudding” Model

This model assumed that the atom was a homogeneous sphere with mass and charge distributed uniformly.



Rutherford Atomic Model

This model assumed that all the positive charge and most of the mass of the atom was concentrated at the nucleus. The remaining volume was occupied by the remaining negative electrons.



Problems with this model:

1. If there are Z protons in the nucleus, how do you account for the rest of the mass?
2. What force keeps the protons confined in the nucleus?
3. How do the electrons move around the nucleus and how do they account for the spectral emission lines?