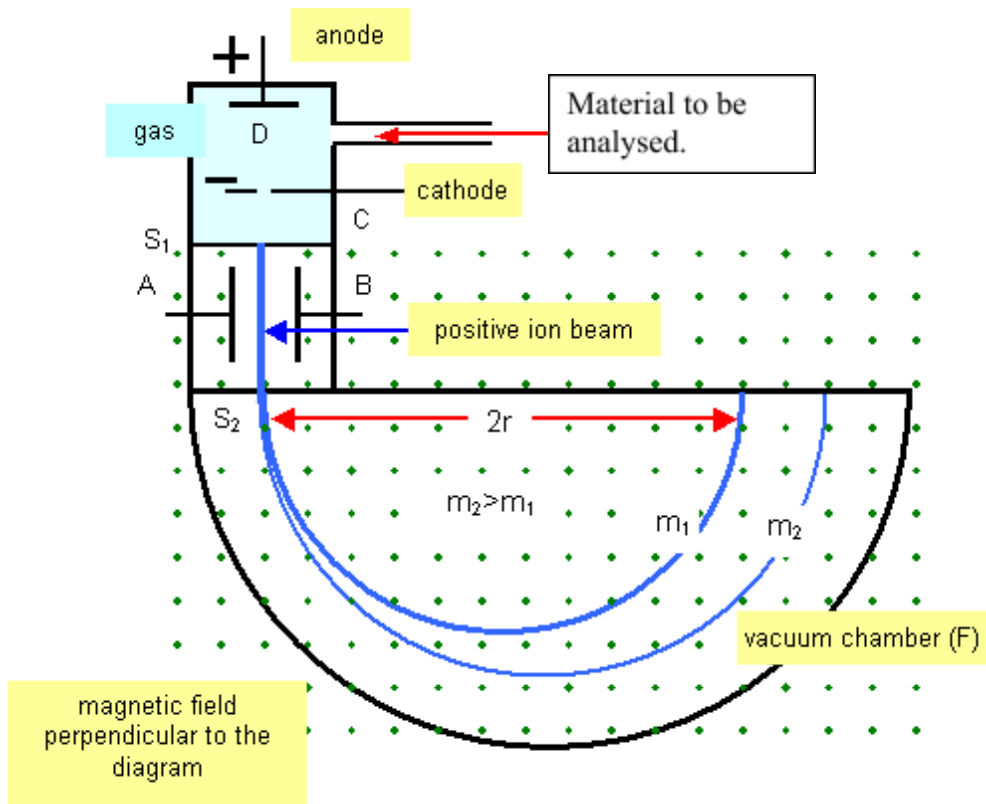


Physics 12 Section 20-12

Mass Spectrometer

1. The mass spectrometer was first developed in the early part of the last century. Like a spectroscope splitting light into its component colours,
2. The mass spectrometer can split a sample of matter into its component elements based on the mass of the elements.



3. In area D the material to be analysed is ionized.
4. Between A and B there is a magnetic field coming out of the page and an electric field going from A to B.

5. This ensures that only ions with the same velocity emerge and go into region S_2 .

6. The atoms of an element were found to have slightly different masses.

