

## The structure of Atoms

(1) mention any three properties of electrons.

→ property 1 - electrons are negatively charged particles.

property 2 - The mass of the electron is  $1/2000$  times less than the mass of proton and neutron.

property 3 - An electron has an electric charge of  $-1.602 \times 10^{-19}$  coulombs) which is equal and opposite to the charge of a proton.

(a) Explain how was protons discovered.

→ In 1909, Rutherford discovered proton in his famous gold foil experiment - He bombarded alpha particles on an ultrathin gold foil.

(2) Who discovered neutron?

→ James Chadwick

Q) what are canal rays?

→ canal rays discovered by - E. Goldstein (1886)

These rays are positively charged and are also known as Anode rays.