

28 What is the mass defect of an α -particle?

mass of a proton = 1.6726×10^{-27} kg

mass of neutron = 1.6749×10^{-27} kg

mass of slow-moving α -particle = 6.6442×10^{-27} kg

A 4.898×10^{-29} kg

B 5.080×10^{-29} kg

C 3.297×10^{-27} kg

D 6.642×10^{-27} kg

29 Rutherford's α -particle scattering experiment consisted of an α -particle source that directed its