$\lambda = h/mv$, where

λ is wavelength in m,

h is Planck's constant (6.626×10^{-34} J*s),

m is mass in kg,

m_p - the mass of proton

m_n - the mass of neutron

m_e - the mass of electon

$m_{a.p}$ - the mass of alpha part

v is speed in m/s.

To complete this problem you must convert your wavelength to meters and your mass to kilograms.

$\lambda = 750.0$ nm(1 m)/(1 x 109 nm) = 7.5×10^{-7} m
$m_p = 1.673 \times 10^{-24}$ g(1 kg)/(1000 g) = 1.673×10^{-27} kg

Rearrange the equation and solve for speed.

$v = h/m\lambda = (6.626 \times 10^{-34}$ J*s)/(1.673×10^{-27} kg)(7.5×10^{-7} m) = 0.528 m/s

$m_n = 1.675 \times 10^{-24}$ g(1 kg)/(1000 g) = 1.675×10^{-27} kg
$v = h/m\lambda = (6.626 \times 10^{-34}$ J*s)/(1.675×10^{-27} kg)(7.5×10^{-7} m) = 0.527 m/s

$m_e = 9.109 \times 10^{-28}$ g(1 kg)/(1000 g) = 9.109×10^{-31} kg
$v = h/m\lambda = (6.626 \times 10^{-34}$ J*s)/(9.109×10^{-31} kg)(7.5×10^{-7} m) = 969.9 m/s
$m_{a.p} = 6.645 \times 10^{-24}$ g(1 kg)/(1000 g) = 6.645×10^{-27} kg
$v = h/m\lambda = (6.626 \times 10^{-34}$ J*s)/(6.645×10^{-27} kg)(7.5×10^{-7} m) = 0.133 m/s