

1 The equation relating pressure and density is $p = \rho gh$.

How can both sides of this equation be written in terms of base units?

- A $[N\ m^{-1}] = [kg\ m^{-3}] [m\ s^{-1}] [m]$
- B $[N\ m^{-2}] = [kg\ m^{-3}] [m\ s^{-2}] [m]$
- C $[kg\ m^{-1}\ s^{-2}] = [kg\ m^{-3}] [m\ s^{-2}] [m]$
- D $[kg\ m^{-1}\ s^{-1}] = [kg\ m^{-1}] [m\ s^{-2}] [m]$

2 What is a reasonable estimate of the diameter of an alpha particle?