

14 When water is boiled at atmospheric pressure, the steam produced behaves like an ideal gas. A water molecule has a mass of $18u$.

What is the root-mean-square speed of the water molecule in the steam?

A 330 m s^{-1}

B 370 m s^{-1}

C 640 m s^{-1}

D 720 m s^{-1}