

- 23 The diagram illustrates the position of particles in a progressive sound wave at one instant in time.



The speed of the wave is v . P and Q are two points in the wave a distance L apart.

What is an expression for the frequency of the wave?

A $\frac{v}{2L}$

B $\frac{v}{L}$

C $\frac{2v}{L}$

D $\frac{L}{v}$