

- 15** A sphere of mass 20 g undergoes simple harmonic motion with a period of 9.0 s. The speed of the sphere 3.0 s after starting from the equilibrium is  $4.0 \text{ m s}^{-1}$ .

What is the kinetic energy of the sphere when it next passes the equilibrium position?

- A** 0 J                      **B** 0.16 J                      **C** 0.21 J                      **D** 0.64 J

