

- 10** Point P is at the centre of a uniform sphere M. The work done by an external force in bringing a mass of 1.0 kg from infinity to point Q is -2.0 J .



The ratio $\frac{PQ}{QR}$ is $\frac{1}{3}$.

What is the work done by an external force to bring a mass of 3.0 kg from Q to R?

- A** -18 J **B** -4.5 J **C** 4.5 J **D** 18 J