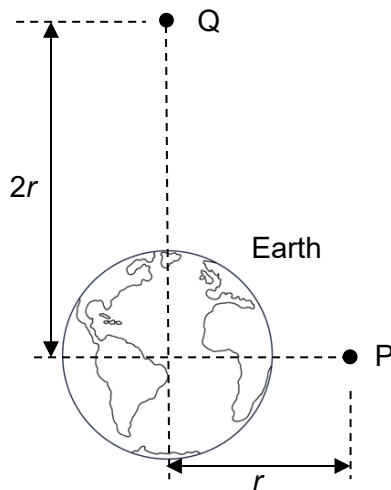


- 12 P and Q are two points above Earth's surface at distances  $r$  and  $2r$  respectively from the centre of the Earth.



The gravitational potential at P is  $-800 \text{ kJ kg}^{-1}$ . When a  $1.00 \text{ kg}$  mass is taken from Q to P, what is the work done on the mass?

- A**  $-400 \text{ kJ}$       **B**  $-200 \text{ kJ}$       **C**  $400 \text{ kJ}$       **D**  $800 \text{ kJ}$

- 13 When a graph of temperature in Kelvin against temperature in degrees Celsius is plotted, a