

- 11** The gravitational potentials on the surface of a planet P and on the surface of its moon Q are -120 MJ kg^{-1} and -20 MJ kg^{-1} respectively.

The minimum amount of energy required to project a 1 kg mass from the surface of Q to the surface of P is E .

Which of the following correctly describes the value of E ?

- A** $E < 20 \text{ MJ}$
- B** $E = 20 \text{ MJ}$
- C** $20 \text{ MJ} < E < 100 \text{ MJ}$
- D** $100 \text{ MJ} < E < 120 \text{ MJ}$