

- 10** Mars has a diameter approximately 0.5 times the diameter of the Earth, and the mass of Mars is about 0.1 times the mass of the Earth.

The gravitational potential at the Earth's surface is  $-63 \text{ MJ kg}^{-1}$ .

What is an approximate value for the gravitational potential at the surface of Mars?

**A**  $-13 \text{ MJ kg}^{-1}$

**B**  $-25 \text{ MJ kg}^{-1}$

**C**  $-95 \text{ MJ kg}^{-1}$

**D**  $-320 \text{ MJ kg}^{-1}$