

$$\textcircled{1} \quad 250000 \text{ g} \cdot \frac{1 \text{ kg}}{1000 \text{ g}} = 250 \text{ kg}$$

$$\textcircled{A} \quad 0.5 \text{ km} \cdot \frac{1000 \text{ m}}{1 \text{ km}} = 500 \text{ m}$$

$$\frac{45 \text{ km}}{\text{min}} \cdot \frac{1000 \text{ m}}{1 \text{ km}} \cdot \frac{1 \text{ min}}{60 \text{ s}} = 750 \text{ m/s}$$

$$E_c = \frac{1}{2} \cdot m \cdot v^2 = \frac{1}{2} \cdot 250 \cdot 750^2 = 70312500 \text{ J}$$

$$E_p = m \cdot g \cdot h = 250 \cdot 9.8 \cdot 500 = 1225000 \text{ J}$$

$$\boxed{E_m = E_c + E_p = 71537500 \text{ J}}$$

$$\textcircled{B} \quad E_c = \frac{1}{2} \cdot m \cdot v^2 = \frac{1}{2} \cdot 250 \cdot 5^2 = 3125 \text{ J}$$

$$E_p = m \cdot g \cdot h = 250 \cdot 9.8 \cdot 250 = 612500 \text{ J}$$

$$\boxed{E_m = E_c + E_p = 615625 \text{ J}}$$