

17 An object travelling with a speed of 10 m s^{-1} has kinetic energy 1500 J .

The speed of the object is increased to 40 m s^{-1} .

What is the new kinetic energy of the object?

A 4500 J

B 6000 J

C $24\,000 \text{ J}$

D $1\,350\,000 \text{ J}$