

Kinetic Energy

Energy of movement.

$$E_K = \frac{1}{2}mv^2$$

1. A rocket of mass 1000 kg is travelling at 10 ms^{-1}



2. A car of mass 800 kg moving with speed 12 ms^{-1}



3. A meteor of mass 20 kg moving at 1000 ms^{-1}



4. A jet of mass 200,000 kg moving with speed 400 ms^{-1}



5. Find the mass of a small truck travelling at 4 ms^{-1} which has a kinetic energy of 80J



6. A hammer with speed 2 ms^{-1} and kinetic energy 300 J is moving towards an astronaut. Find the mass of the object.



7. A 200 kg meteor has kinetic energy of 360,000 Joules. Determine the speed it is moving at.



8. A 70 kg skateboarder has 140 J of kinetic energy. Find her speed.



9. A jet has a mass of 20,000 kg and it has a kinetic energy of 900 MJ. Find its speed.

