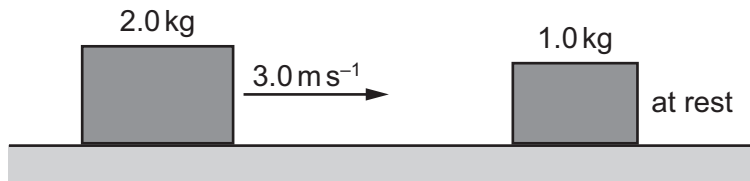


- 10** An object of mass  $2.0\text{ kg}$  is travelling at a speed of  $3.0\text{ m s}^{-1}$  on a horizontal frictionless surface. This object collides head-on with a stationary object of mass  $1.0\text{ kg}$ . The two objects stick together on impact.



How much kinetic energy is lost on impact?

- A** zero                      **B**  $2.0\text{ J}$                       **C**  $2.4\text{ J}$                       **D**  $3.0\text{ J}$