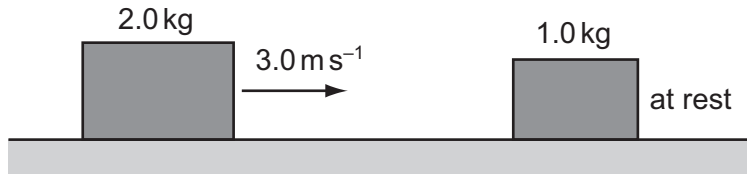**11** A 2.0 kg mass travelling at $3.0\,\text{m}\,\text{s}^{-1}$ on a frictionless surface collides head-on with a stationary 1.0 kg mass. The masses stick together on impact.

How much kinetic energy is lost on impact?

A zero   **B** 2.0 J   **C** 2.4 J   **D** 3.0 J