

**10** Which of the following is a statement of the principle of conservation of momentum?

- A** In an elastic collision momentum is constant.
- B** Momentum is the product of mass and velocity.
- C** The force acting on a body is proportional to its rate of change of momentum.
- D** The momentum of an isolated system is constant.

**11** A 2.0 kg mass travelling at  $2.0 \text{ m s}^{-1}$  on a frictionless surface collides head-on with a stationary