

- 9** Which is a statement of the principle of conservation of momentum?
- A** A force is equal to the rate of change of momentum of the body upon which it acts.
 - B** In a perfectly elastic collision, the relative momentum of the bodies before impact is equal to their relative momentum after impact.
 - C** The momentum of a body is the product of the mass of the body and its velocity.
 - D** The total momentum of a system of interacting bodies remains constant, providing no external force acts.

10 The gravitational field strength on the surface of planet B is one tenth of that on the surface of