

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 P is one-tenth of that on the surface of