

7 A body is released from rest and falls vertically in air of constant density.

Which statement about the motion of the falling body is correct?

- A** As it accelerates, its weight decreases so that its acceleration decreases until it travels with constant velocity.
- B** It accelerates initially at 9.8 m s^{-2} but the drag force increases so its acceleration decreases.
- C** Its velocity increases at a constant rate until its velocity becomes constant.
- D** The drag force of the air increases continually and eventually the velocity decreases.

Space for working