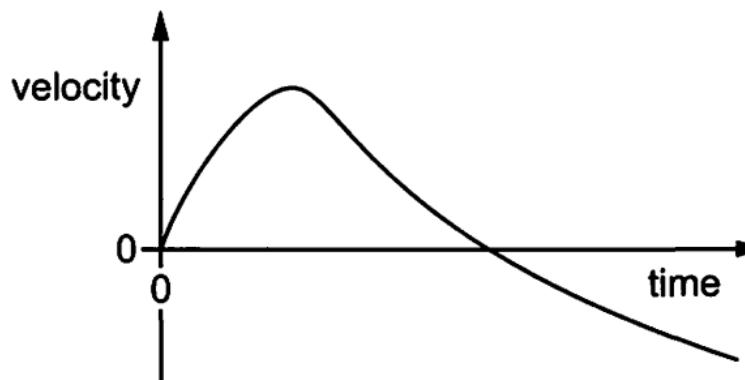


6 The graph shows the variation with time of the velocity of an object.



Which object, moving under the force of gravity, could be represented by the graph?

- A a feather falling from a bird through the air towards the ground
- B a javelin in the Olympics after leaving the hand of the thrower and falling towards the ground
- C a rubber ball falling vertically onto the floor, bouncing and rising into the air
- D an inflated balloon released so that it moves vertically upwards initially, propelled by escaping air, eventually falling back towards the ground

7 A ball is fired vertically upwards at 12 m s^{-1} at time $t = 0$. Consider it travelling with a uniform deceleration.