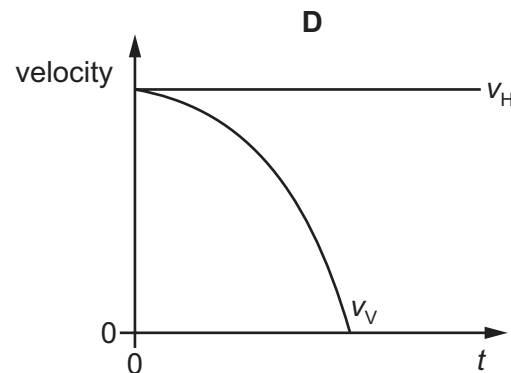
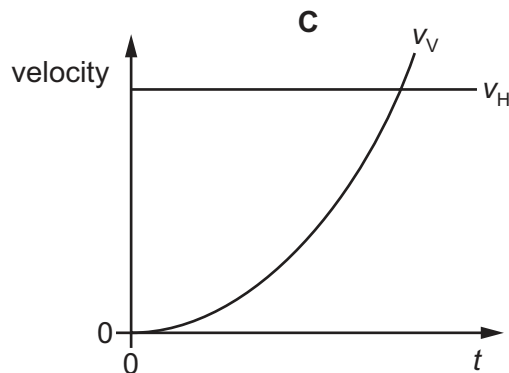
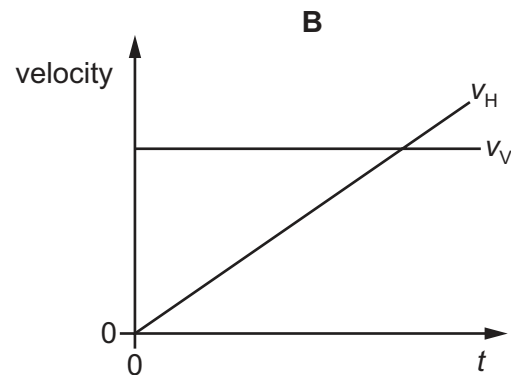
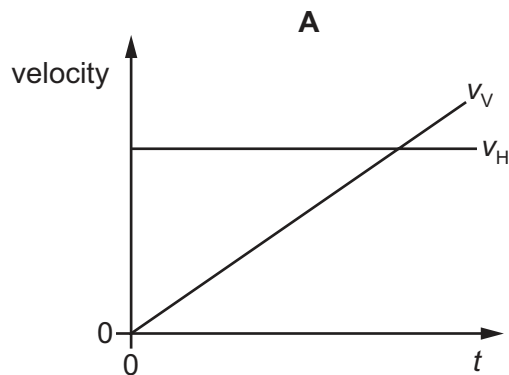


- 6 A stone is projected horizontally at time  $t = 0$  and falls. Air resistance is negligible. The stone has a horizontal component of velocity  $v_H$  and a vertical component of velocity  $v_V$ .

Which graph shows how  $v_H$  and  $v_V$  vary with time  $t$ ?



- 7 Two isolated spheres have masses 2.0 kg and 4.0 kg. The spheres collide and then move apart.