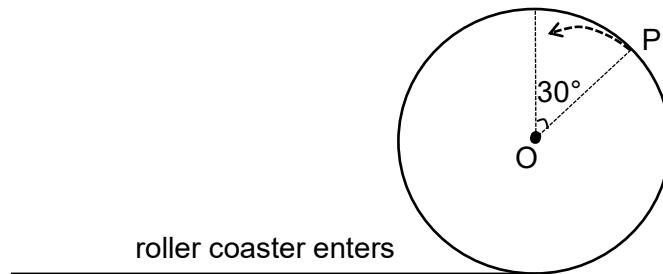


- 10** A toy roller coaster attempts a loop-a-loop. It enters the bottom of loop of radius 1.0 m with insufficient speed. It loses contact at the point P as shown. The line joining P and the centre of the loop O makes an angle 30° with the vertical.



What is the speed at P which the roller coaster just loses contact with the loop?

- A** 0 m s^{-1} **B** 2.2 m s^{-1} **C** 2.9 m s^{-1} **D** 3.1 m s^{-1}