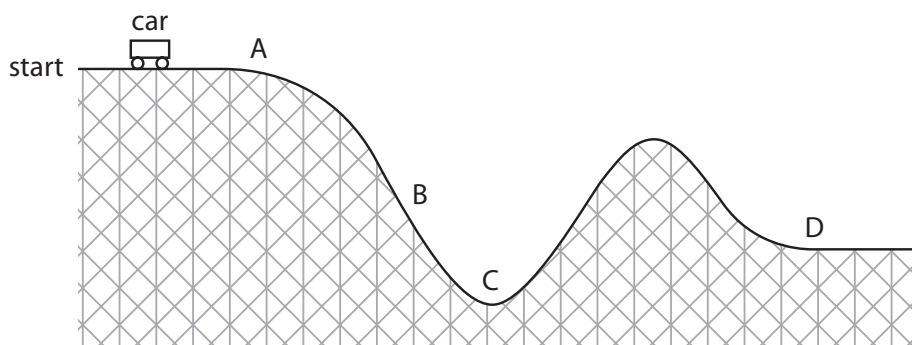


- 3 The diagram shows part of a roller coaster ride.
The car is pulled towards point A and then released.



- (a) Choose letters from the diagram to complete this sentence.

(2)

The car experiences the greatest downwards acceleration at point
and it has the most kinetic energy at point

- (b) The maximum gravitational potential energy of the car is 380 kJ.

The maximum height of the car is 45 m.

Calculate the mass of the car.

[gravitational potential energy = mass \times g \times height]

(3)

mass = kg

(Total for Question 3 = 5 marks)



P 6 1 9 3 7 R A 0 5 2 0