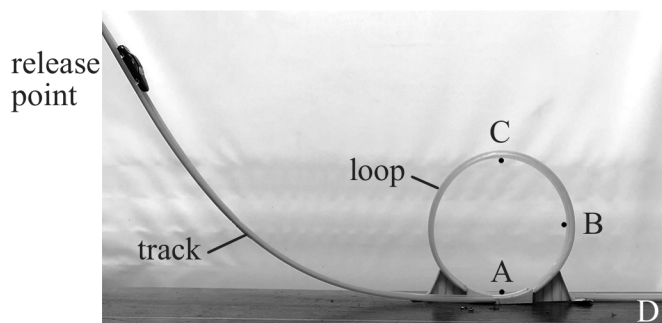


- 13 The photograph shows a track for a toy car. The car moves down the track towards a circular loop. The loop starts at point A.



If the release point of the car is high enough, the car moves fast enough to pass point C and complete the loop, continuing to the end of the track at point D.

If the release point is too low, the car falls off the track between point B and point C.

Deduce whether a car released from a vertical height of 25 cm above point A will complete the loop and reach point D. You should assume that friction is negligible.

vertical height of point C above point A = 22 cm

mass of toy car = 33 g