When you get in the Cannibal roller coaster car, an elevator lifts the car to the top of the tower. From here, the car exits the tower and begins the thrilling ride.

Useful Equations

‘h’ is the height of the track, found on page 6
‘m’ is the mass (assume 1000 kg for the mass of the car)
‘g’ is the acceleration due to gravity
‘PE’ is the potential energy

\[ PE = m \times g \times h \]

Questions

1. What provides the potential energy for Cannibal?

2. What is the potential energy of a Cannibal car where track actually exits the tower?

3. What is the potential energy at the bottom of the tower?