

POTENTIAL ENERGY

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 tower or track, found on page 6

'm' is the mass

'g' is the acceleration due to gravity

'PE' is the potential energy

$$PE = m * g * h$$

Questions

1. What provides the potential energy for Cannibal?
2. What would be the potential energy of a Cannibal car if the track started at the top of the tower (leave mass as a variable, m, so that answer is in terms of a number times m, for example as 40 x m Joules).?
3. What is the potential energy of a Cannibal car where track actually exits the tower (leave mass as a variable, m, so that answer is in terms of a number times m, as above).?
4. What is the potential energy at the bottom of the tower (leave mass as a variable, m, so that answer is in terms of a number times m, as above).?