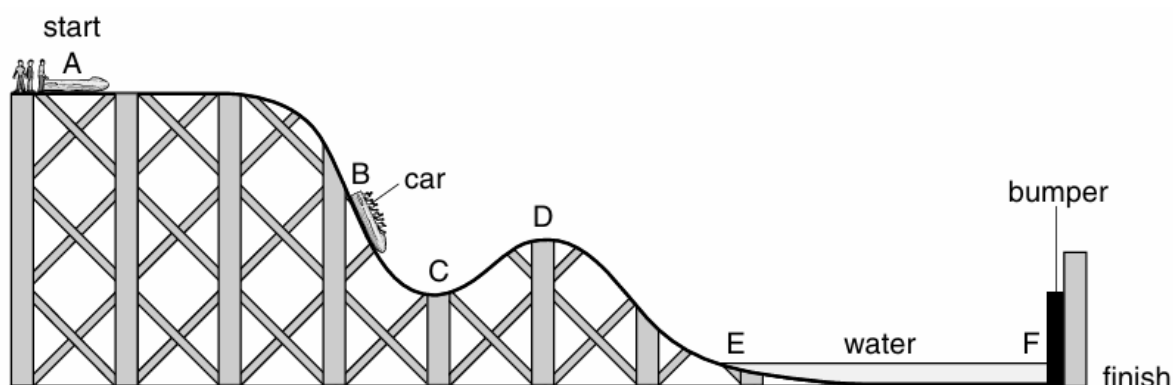


7. The photograph shows some pupils in a log car on a theme-park ride.



The drawing below shows the ride.

The letters A, B, C, D, E and F show different points along the track.



The car starts from A and travels to F, where it stops by hitting a bumper.  
At E the car enters a trench filled with water.

- (a) (i) At which **two** points does the car have **no** kinetic energy?  
Give the **two** correct letters.
- \_\_\_\_\_ and \_\_\_\_\_
- (ii) At which point does the car have the **most** gravitational potential energy?  
Give the correct letter.
- \_\_\_\_\_

- (iii) At which point does the car have **some** kinetic energy and the **least** gravitational potential energy?  
Give the correct letter.

\_\_\_\_\_

- (b) (i) The cars are **not** powered by a motor.  
What force causes the cars to move along the track from B to C?

\_\_\_\_\_

- (ii) When a car splashes through the water at E, it slows down.  
What force acts on the car to slow it down?

\_\_\_\_\_

- (c) Complete the sentence below by choosing from the following words.

chemical	gravitational potential	kinetic
light	sound	thermal

When the car hits the bumper at F, its \_\_\_\_\_ energy

is transferred into \_\_\_\_\_ energy and

\_\_\_\_\_ energy.