

**Prelab Questions**

These questions need to be completed before entering the lab.  
Show all workings.

Markers  
Initials

**Prelab 1**

A **500 kg** car is at rest at the top of a **50.0 m** high hill.

- a) Calculate the mechanical energy of the car at the top of the hill.

The car rolls to the bottom of the hill. At the bottom of the hill, the car has a speed of **27.8 m/s**.

- b) Calculate the mechanical energy of the car at the bottom of the hill.  
(Assume the bottom of the hill has a height of **0 m**.)

- c) Calculate the work done by friction on the car as it rolled down the hill.

**Prelab 2**

Write, in a sentence or two, the objective of this experiment.

Staple completed prelab to this page