

Name

Teacher

Hour



## *WILD THING*

**Objective:** Determine the average speed of the Wild Thing, using the length of the ride and time for one trip.

**Knowns:**

Length=              1634   m

Time for run=                        s

**Formula used:**

**Work:**

**Answer:**                                    m/s

**Objective:** Calculate the Gravitational potential energy of the car and people at the top of the track. The height of the track is 60.96 m.

**Knowns:** Height= \_\_\_\_\_ m  
Mass of car= \_\_\_\_\_ kg  
# of people in car= \_\_\_\_\_ people  
Mass of people in car= \_\_\_\_\_ people x 60 kg= \_\_\_\_\_ kg  
Total Mass= \_\_\_\_\_ kg

**Formula Used:**

**Work:**

**Answer:** \_\_\_\_\_ Newton-meters

**Suggested Procedure:** Using the Law of Conservation of Energy, calculate the expected speed of the car at the bottom of the hill.

**Knowns:** Gravitational Potential Energy= \_\_\_\_\_ Newton-meters

**Formula Used:**

**Known:**

**Work:**

**Answer:** \_\_\_\_\_ m/s