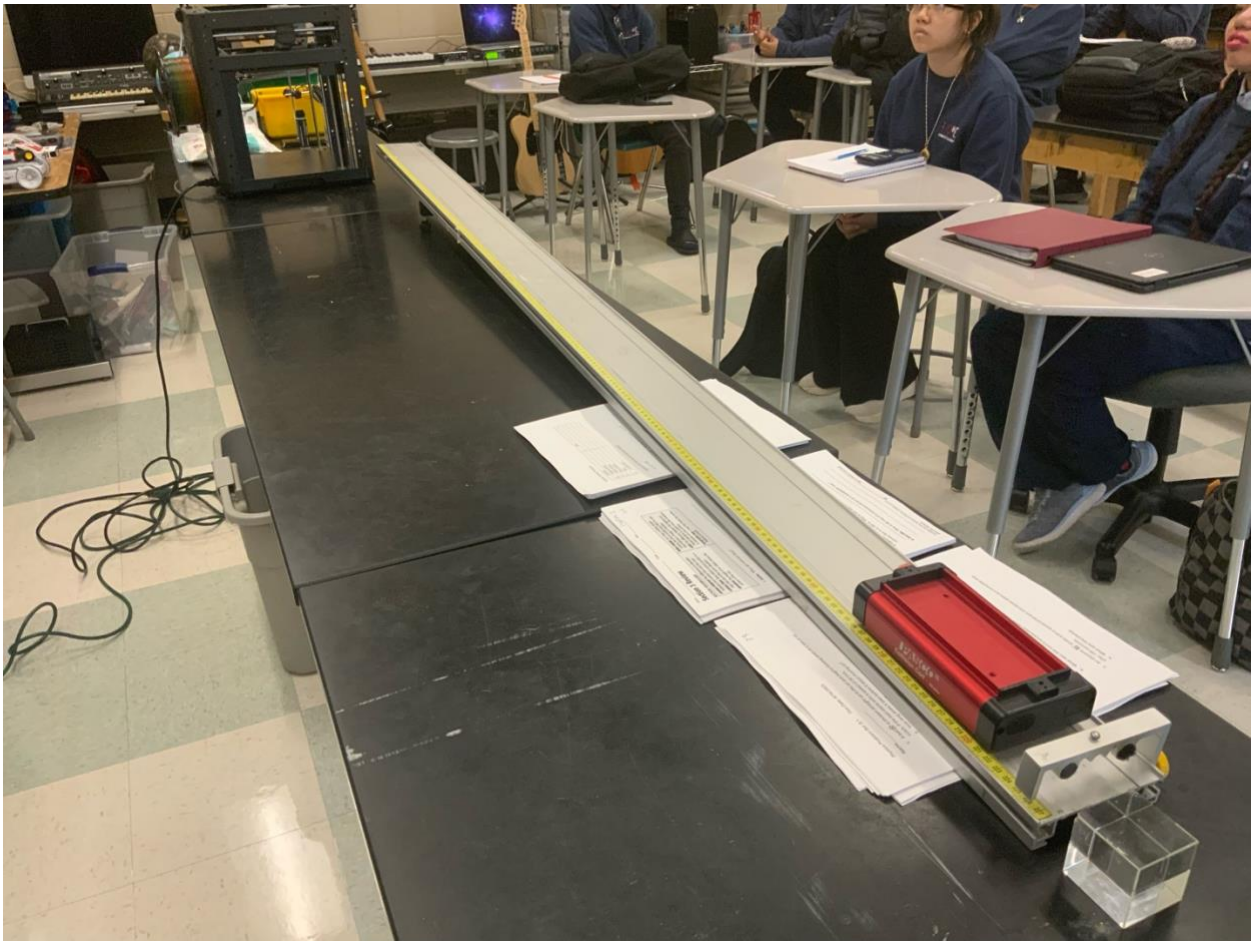
Cart on an Incline Lab



The objective of this lab is to determine the acceleration of a 🚙 cart rolling down an incline

Procedure

We released a cart from rest from the top of an incline, and we timed it.

The information we collected was:

The lengthy of the track was 2m.

The average time was 3.53 seconds

Calculations 

First, we find average velocity using $v_{ave} = \Delta x/t$: 2m/3.53s =0.567 m/s

Next find v_f by multiplying the average velocity by 2: v_f =1.13/s

Finally find the acceleration using $a = (v_f - v_o)/t$: a =(1.13m/s)/3.53s =.32 m/s^2