

Raw Data Sheet

Student Name: _____

Team members:

1.- _____ 2.- _____

3.- _____ 4.- _____

Instructor: _____

Velocity and Acceleration of Students

How does your motion correspond to the readings on the graph? Does the motion sensor read negative when you approach or when you walk away?

Acceleration Along an Air Track

Record the mass of the car and of the weight as instructed in the manual. Record the slope of the velocity plot. Make one printout per group to be handed in, and note down the section title. Include units.

 m_1 (mass of the cart): _____ m_2 (mass of the hanging weight): _____

Slope: _____

Plot(v vs. t):

String Tension Along an Air Track

Record the mass of the car and of the weight as instructed in the manual. Record the slope of the velocity plot and the value of the tension. Make one printout (per plot) per group to be handed in, and note down the section title. Be sure to write down the units.

 m_1 (mass of the cart with the force sensor): _____ m_2 (mass of the hanging weight): _____

Slope: _____

Tension: _____

Plot (v vs. t): Plot (F vs. t):