Raw Data Sheet

Student Name: _____

Team members:
1.- _____ 2.- _____

3.- _____ 4.- _____

Instructor: _____

Spring Constant

Record the relaxed length l_0 : _____ (cm)

Table 1: Rows top to bottom represent mass and length of the spring, respectively.

m (g)					
l (cm)					

Kinematics

Record the frequency of the sparks : _____ (Hz)

Record the equilibrium distance, r_0 : _____ (cm)

Record the Puck's mass, m_p : _____ (kg)

Table 1.- Raw data: point's index along each track; r is the distance between the paths, measured between points with the same index; x is the distance between mass center points. Δa and Δb are the distances between every third point along each track;

Note: time = index/spark frequency

Raw data					Data Analysis								
Index	r (cm)	x (cm)	Δa (cm)	Δb (cm)	time (s)	$v_{C.M.}$ (m/s)	v_a (m/s)	v_b (m/s)	$\frac{1}{2}m_p v_a^2$ (J)	$\frac{1}{2}m_p v_b^2$ (J)	$\frac{1}{2}m_p(v_a^2+v_b^2)$ (J)	$\frac{1}{2}(r-r_0)^2 k_s$ (J)	E (J)
0		NA	NA	NA									
3													
6													
9													
12													
15													
18													
21													
24													
27													
30													
33													
36													
39													
42													
45													
48													
51													
54													
57													
60													
63													
66													