P1310L, Binary System
Lab 7, Raw Data Sheet

Submitted by: _____ Experiment's date: _____

Team members:

1.- _____ 2.- _____

3.- _____ 4.- _____

Instructor must initial:_____

Spring Constant

Record the relaxed length l_0 : _____ (cm)

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

mass (g)					
length (cm)					

Kinematics

Table 2: Spark Table.

Spark Frequency (Hz)	Equil. Distance (cm)	Puck's Mass (g)

Organize your data in a spreadsheet with the same columns as in Table 3. You may want to collect your data directly into the spreadsheet. The instructor may give specific instructions including how many points are requires.

Table 3: Track Data. Columns left to right: point's index along tracks; r, distance between the paths, measured between points with the same index; x, distance between mass center points. Δa and Δb are the distances traveled by each puck every third point along each track. K_a, K_b are the kinetic energies of the individual pucks; K_{ab} is the kinetic energy of the combined system. U is the potential energy stored in the spring; E is the total energy.

Raw data					Data Analysis								
Idx	r (cm)	x (cm)	Δa (cm)	Δb (cm)	time (s)	$v_{C.M.}$ (m/s)	v_a (m/s)	v_b (m/s)	K_a (J)	K_b (J)	K_{ab} (J)	U (J)	E (J)
0		NA	NA	NA									
3													
6													
9													
12													
15													
18													
21													
24													
27													
30													