Name:	Partners:

Juice Box Lab

You will be provided with 2 questions to answer through an inquiry process (experiment). Within your group, discuss and come up with a logical method and observation chart. Remember your chart should have the raw data first (what you will measure) followed by the calculated data. Any calculation you do should have a sample calculation provided under the observation chart(s).

You should include: Question/Purpose, Hypothesis, Labelled sketch for Method, Observations , Conclusion & Analysis.

Question:
A) Does the mass affect the frequency of a longitudinal spring wave?
B) Does the amplitude affect the frequency of a longitudinal spring wave?

Assessing the Lab

Inquiry – all of the following should be under the 'Observations' subtitle.

- Proper observation table (all raw and calculated values in table with headings)   /2

Inquiry	- Sample calculations provided for each type of calculation done. GRASP used. What is being calculated is clearly labelled.	/2
/ 10	- Graph of each set of results (2 separate graphs) which have a proper line of best fit or 'curve' of vbest fit. Included is a prper description of each graph including a "as…then" statement. Make sure to follow proper graphing expectations *Do NOT put the graph at the end of this inquiry. Put it with the observations *	/6

Application – the following should be under the 'Conclusion' subtitle

- Using your experimental data, properly answer the 2 questions originally posed .   /2

Application – the following should be under the 'Analysis' subtitle

Application	#1. What was the independent variable(s) and dependent variable(s) in this experiment? What variables did you control for?	/2
/ 10	#2. Take your greatest amplitude (when testing affect of amplitude) and based on your results, predict what you would observe if you increased that amplitude 1.5 x. What would the frequency be? Why?	/3
	#3. Based on your findings, what would you predict would happen if you put 5 juice boxes on the spring? Be as precise as you can and explain your answer.	/3