

Name: \_\_\_\_\_

Date of Lab: \_\_\_\_\_

Partner: \_\_\_\_\_

### Worksheet 1: Waves on a String

<i>Parts 1 &amp; 2: Basic Measurements for <math>n = 3</math>, <math>m = 100</math> g</i>	
<i>Quantity</i>	<i>Value</i>
String Length $L$ (cm)	$\pm$
Frequency $f_3$ (Hz)	$\pm$
Wavelength $\lambda$ (cm)	$\pm$
<i>Parts 3 &amp; 4: Varying Frequency</i>	
Slope (units: )	$\pm$
Intercept (units: )	$\pm$
Wave Speed (m/s)	$\pm$
<i>Parts 5 &amp; 6: Varying Tension</i>	
Slope (units: )	$\pm$
Intercept (units: )	$\pm$
String Linear Density $\mu$ (g/m)	$\pm$
<i>Measurement Using Sample String</i>	
String Length $L$ (cm)	$\pm$
String mass $m$ (g)	$\pm$
String Linear Density $\mu$ (g/m)	$\pm$
<p>You now have two measurements of <math>\mu</math>, neither of which is perfect. What do <i>you</i> think <math>\mu</math> really is? Justify your answer; also, be quantitative, and include an uncertainty.</p>	