	A	B	C	D	E	F	G	H	I	J	K	L
1	Your name		Date									
2	Partner's name											
3												
4	**Phys 1101/1120 - Richmond campus**					**DISCLAIMER: These example data are purposefully**						
5	**Mini-lab: Resonance of a String**					**inaccurate. You may test your spreadsheet equations**						
6						**for correctness using these values, but your real**						
7	**DATA**					**experimental values will be very different.**						
8												
9		**internodal distance**				**accel. due to gravity**						
10		**d (cm)**	**δd (cm)**	**δd/d**		**g (m/s^2)**	**dg (m/s^2)**	**dg/g**				
11	1	**61**	**0.5**	0.82%		**9.81**	**0.01**	0.10%				
12	2	**60.4**	**0.3**	0.50%								
13	3	**60.5**	**0.3**	0.50%		**linear string density**						
14	4	**60.7**	**0.5**	0.82%		**μ (g/m)**	**δμ (g/m)**	**δμ/μ**				
15						**5.43**	**0.15**	2.76%				
16												
17						**hanging mass**						
18						**m (g)**	**dm (g)**	**dm/m**				
19						**165**	**0.1**	0.06%				
20												
21	**CALCULATIONS**											
22												
23		**internodal distance**				**linear string density**				**cord tension**		
24		**d (m)**	**δd (m)**	**δd/d**		**μ (kg/m)**	**δμ (kg/m)**	**δμ/μ**		**T (N)**	**dT (N)**	**dT/T**
25	1	0.61	0.005	0.82%		0.00543	0.00015	2.76%		1.61865	0.00192	0.12%
26	2	0.604	0.003	0.50%								
27	3	0.605	0.003	0.50%		**hanging mass**				**wave speed**		
28	4	0.607	0.005	0.82%		**m (kg)**	**dm (kg)**	**dm/m**		**v (m/s)**	**dv (m/s)**	**dv/v**
29						0.165	0.0001	0.06%		17.2654	0.238692	1.38%
30		**average internodal distance**										
31		**d_ave (m)**	**δd_ave (m)**	**(δd/d)ave**						**frequency**		
32		0.6065	0.0026458	0.44%						**f (Hz)**	**df (Hz)**	**df/f**
33										14.23363	0.206342	1.45%
34		**wavelength**										
35		**λ (m)**	**dλ (m)**	**dλ/λ**								
36		1.213	0.0052915	0.44%								