

	A	B	C	D	E	F	G	H	I	J	K
1	Your name		Date								
2	Partner's name										
3											
4	Phys 1101/1120 - Richmond campus				DISCLAIMER: These example data are purposefully						
5	Expt. 4: The Simple Pendulum				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	Pendulum Length:				Period:						
10	L (cm)	dL (cm)	dL/L		T (s)	dT (s)	dT/T				
11	21	0.3	1.43%		0.9323	0.009323	1.00%				
12	31	0.3	0.97%		1.1215	0.011215	1.00%				
13	41	0.3	0.73%		1.2897	0.012897	1.00%				
14	51	0.3	0.59%		1.4384	0.014384	1.00%				
15	61	0.3	0.49%		1.5731	0.015731	1.00%				
16	71	0.3	0.42%		1.6972	0.016972	1.00%				
17	81	0.3	0.37%		1.8128	0.018128	1.00%				
18	91	0.3	0.33%		1.9214	0.019214	1.00%				
19	99	0.3	0.30%		2.0041	0.020041	1.00%				
20											
21	CALCULATIONS:										
22											
23	Pendulum Length:				Period Squared:			Slope from Linegraph:			
24	L (m)	dL (m)	dL/L		T^2 (s^2)	dT^2 (s^2)	d(T^2)/(T^2)	m (s^2/m)	dm (s^2/m)	dm/m	
25	0.21	0.003	1.43%		0.869183	0.0173837	2.00%	4.05697	0.151	3.72%	
26	0.31	0.003	0.97%		1.257762	0.0251552	2.00%				
27	0.41	0.003	0.73%		1.663326	0.0332665	2.00%				
28	0.51	0.003	0.59%		2.068995	0.0413799	2.00%	Calculation of g:			
29	0.61	0.003	0.49%		2.474644	0.0494929	2.00%	g (m/s^2)	dg (m/s^2)	dg/g	
30	0.71	0.003	0.42%		2.880488	0.0576098	2.00%	9.73101	0.3621872	3.72%	
31	0.81	0.003	0.37%		3.286244	0.0657249	2.00%				
32	0.91	0.003	0.33%		3.691778	0.0738356	2.00%				
33	0.99	0.003	0.30%		4.016417	0.0803283	2.00%				