Name: Class Data
Period: 1.000

Period 1
Sean Cordy
Wyatt Adams

FACTORS THAT AFFECT ACCELERATION LAB

Purpose: Determine how force (in washers) and addition mass (in grams) affect acceleration by analyzing the graphs of a vs F and a vs added mass.

Procedure:

DATA TABLE:

trial	**X-Axis 1st** F (washers)	*measured* s flag m	*measured* s track m	*measured* **Add** mass g	*measured* **gate 1** t 1 s	*measured* **gate 2** t 2 s	*calculated* **V1=s flag/t1** v 1 m/s	*calculated* **V2=s flag/t2** v2 m/s	Y-Axis Both Graphs *calculated* **a=(v2^2-v1^2)/(2*s) track** a m/s/s
1	1	0.025	0.755	0	0.067	0.022			
2	2	0.025	0.755	0	0.065	0.018			
3	3	0.025	0.755	0	0.046	0.014			
4	4	0.025	0.755	0	0.044	0.013			
5	5	0.025	0.755	0	0.040	0.012			
6	6	0.025	0.755	0	0.037	0.011			
7	7	0.025	0.755	0	0.033	0.010			
8	8	0.025	0.755	0	0.033	0.010			
9	9	0.025	0.755	0	0.033	0.010			
10	10	0.025	0.755	0	0.032	0.009			
11	10	0.025	0.755	50	0.035	0.011			
12	10	0.025	0.755	100	0.039	0.012			
13	10	0.025	0.755	150	0.042	0.013			
14	10	0.025	0.755	200	0.051	0.014			
15	10	0.025	0.755	250	0.048	0.015			
16	10	0.025	0.755	300	0.046	0.015			
17	10	0.025	0.755	350	0.051	0.016			
18	10	0.025	0.755	400	0.051	0.017			
19	10	0.025	0.755	450	0.057	0.018			
20	10	0.025	0.755	500	0.063	0.020			

Calculations:

V1=s flag/t1

Graphs: Acceleration vs Force and Acceleration vs Mass

Conclusion:

Summary: