

Newton's 2nd Law of Motion

$$F = M \times A$$

Problem: Does the amount of force affect the acceleration of an object?

Hypothesis:

The greater the force applied the greater the acceleration.

Data/Analysis:

Force applied	Distance Traveled (cm)			
Applied force (N)	Trial 1	Trial 2	Trial 3	Average
1	315	345	412	$357\frac{1}{3}$
2	330	432	630	464
3	150	450	1450	750

Mass (g)	Distance Traveled (cm)			
Applied Mass	1	2	3	Average
250	812	883	814	837
500	701	746	343	$596\frac{2}{3}$
750	413	310	448	$390\frac{1}{3}$