

Step 1 - Finding velocity:

To begin this experiment you will have to learn a little about the velocity of a projectile launched from the “short range” projectile launcher. Shoot the projectile straight up into the air at each possible setting, until you have consistent results.

Use your results to calculate the velocity of the projectile for each setting.



Setting	Average Maximum Height
1 click	
2 clicks	
3 clicks	



Setting	Horizontal Range
1 click	
2 clicks	
3 clicks	

Velocity - 1	
Velocity - 2	
Velocity - 3	

Projectile Motion 2017

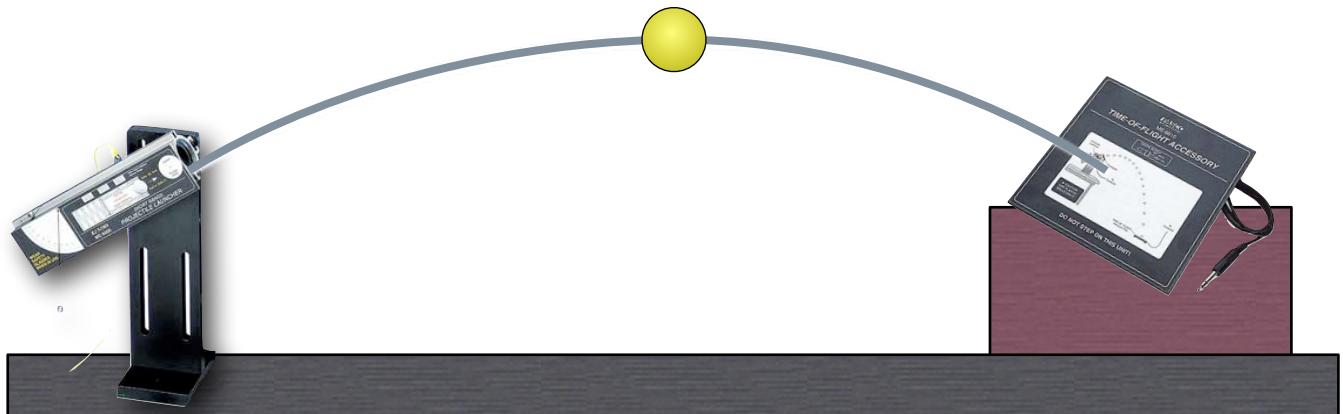
Names _____

Date _____

Step 2 - Equal landing height:

Each group will be given a different angle for their next launch. All groups will use the “2 click” setting. Calculate the time of flight and the range with your values.

<i>Calculated Velocity</i>	<i>Assigned Angle</i>	<i>Predicted Range</i>	<i>Predicted Time</i>
<i>Actual Results</i>			



Projectile Motion 2017

Names _____

Date _____

Step 3 - Launched from an elevated height:

Each group will be given a different angle for their next launch, all will use the “3 click” setting. Calculate the time of flight and the range with your values.

<i>Calculated Velocity</i>	<i>Assigned Angle</i>	<i>Initial Height</i>	<i>Predicted Range</i>	<i>Predicted Time</i>
Actual Results				

