

Raw Data Sheet

Student Name: TA DATA SHEET

Team members:

1.- — 2.- —3.- — 4.- —Instructor: SPENCER IRELAND

Muzzle Velocity

Follow the instructions in the Muzzle Velocity section of the lab manual, starting on page 18. Record your measurements in the following table, where d is the distance between main and accessory gate.

Medium Range	time (s)	d (m)	speed (ms^{-1})
1	0.0194	0.1	5.155
2	0.0194	0.1	5.155
3			
Average speed =			
Long Range			
1	0.0145	0.1	6.897
2	0.0145	0.1	6.897
3			
Average speed =			

Launch Experiments

Follow the instructions in the manual, record your measurements, and sketch your setup. Note that your instructor will give you the angles for these experiments.

First Launch	
range	M
θ (deg)	15°
y_0 (cm)	25.5
y_f (cm)	0
$x - x_0$ (cm)	190

$\Delta y = y_f - y_0$

$R = x - x_0$

Second Launch	
range	L
θ (deg)	15°
y_0 (cm)	25.5
y_f (cm)	0
$x - x_0$ (cm)	3.08

SAME AS EXP. 1 (First Launch)

Angle of Maximum Range

Follow the instructions in your manual starting on page 19.

Medium Range; $y_0 = y_f$	
θ (degrees)	$x - x_0$ (cm)
40	2.23
45	2.28
50	2.23

