## Raw Data Sheet

Student Name: $\qquad$
Team members:
1.- $\qquad$ 2.- $\qquad$
3.- $\qquad$ 4.- $\qquad$
Instructor: $\qquad$

## 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 $\left(\mathrm{ms}^{-1}\right)$ |
| :---: | :---: | :---: | :---: |
| 1 |  |  |  |
| 2 |  |  |  |
| 3 | Average speed $=$ |  |  |
|  |  |  |  |
| Long Range |  |  |  |
| 1 |  |  |  |
| 2 |  | Average speed $=$ |  |
| 3 |  |  |  |

## 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 |  |
| $\theta(\mathrm{deg})$ |  |
| $y_{0}(\mathrm{~cm})$ |  |
| $y_{f}(\mathrm{~cm})$ |  |
| $x-x_{0}(\mathrm{~cm})$ |  |


| Second Launch |  |
| :--- | :--- |
| range |  |
| $\theta(\mathrm{deg})$ |  |
| $y_{0}(\mathrm{~cm})$ |  |
| $y_{f}(\mathrm{~cm})$ |  |
| $x-x_{0}(\mathrm{~cm})$ |  |

## Angle of Maximum Range

Follow the instructions in your manual starting on page 19.

| Medium Range; $y_{0}=y_{f}$ |  |
| :---: | :---: |
| $\theta$ (degrees) | $x-x_{0}(\mathrm{~cm})$ |
| 40 |  |
| 45 |  |
| 50 |  |

