

**Diagram 1: This is how you will need to position yourselves for this lab.**

**Data Table**

|  |  |  |
| --- | --- | --- |
| Trial | Angle (Θ) | Displacement (Δx)(Estimate based on decimeters) |
| 1 |  |  |
| 2 |  |  |
| 3 |  |  |
| 4 |  |  |
| 5 |  |  |
| 6 |  |  |
| Averages |  |  |

**Average Calculation Space**

**Table**

X Y Non-axis Variables

Δx= Δy= Θ=

Vx= Viy= Vi=

t= Vfy=

 a = g = -9.8m/s2

**Post-lab questions**

1. What is the velocity of the balloon in the y-axis at the highest height? Why did it change from its initial velocity in the y-axis?
2. Why is half of the time used to calculate Δy?
3. Why is acceleration in m/s2 and not in m/s?