

Rocket Range Experiment

Team Member _____
Names: _____

1. Assign duties for your team. You will need the following positions: Launch Director, Launcher, and Range Officer. (Team members will switch jobs later.)
2. First Launch:
Launcher - Attach the rocket to the launcher and pull back on string until its tail reaches the 60-cm mark. Tilt the launcher until it is pointing upwards at an angle of between 10 and 80 degrees. Release the rocket when the launch command is given.
Launch Director - Record the angle on the data table. Give the launch command. Record the distance the rocket travels.
Range Officer - Measure the distance from the launcher to where the rocket hits the floor (not where it slides or bounces to). Report the distance to the launch director and return the rocket to the launcher for the next launch.
3. Repeat the launch procedures four more times but with a different angle (between 10 and 80 degrees) each time.
4. Run the entire experiment twice more but switch jobs each time. Use the same launch angles used for the first set of launches.
5. Compare your data for the three experiments.

Data Table 1

Launch Angle	Distance

Data Table 2

Launch Angle	Distance

Data Table 3

Launch Angle	Distance

From your data, what launch angle should you use to achieve the greatest distance from the launch site? Test your conclusion.

Why didn't the instructions ask you to test for 0 and 90 degrees?