

Projectile Motion Experiment

Aim: Determine the initial velocity of a projectile fired from a potato gun.

Method:

1. Set the gun to a predetermined angle.
2. Charge the gun with a predetermined amount of propellant.
3. Fire the gun and record the projectile's total time of flight.
4. Measure the range of the projectile.

Results:

Angle of the gun:

Type of propellant:

Amount of propellant:

Range (m)	Time of flight (s)

Average Range:

Average Time of flight:

Calculated Initial Velocity:

Conclusion¹:

¹ Try to determine the initial velocity more accurately by using the simulator **with** air resistance at http://galileo.phys.virginia.edu/classes/109N/more_stuff/Applets/ProjectileMotion/jarapplet.html

Projectile Motion Experiment

Aim: Observe the affect of the gun's angle on the projectile's time of flight and range.

Method:

1. Set the gun to a predetermined angle.
2. Charge the gun with a predetermined amount of propellant.
3. Fire the gun and record the projectile's total time of flight.
4. Measure the range of the projectile.
5. Increase the angle of the gun and repeat the procedure.

Results:

Type of propellant:

Amount of propellant:

Initial Velocity:

Angle of the gun	Range (m)	Time of flight (s)

Conclusion: