

Name _____ Date _____ Period _____

Water Rocket Lab

Question to Investigate:

How does the amount of water in a water rocket affect its flight duration?

Hypothesis:

Materials:

-
-
-
-

Procedure:

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.

Data

Conclusion:

My hypothesis was _____ because _____

Sources of Error:

1.

2.

Challenge Questions: (1pt extra credit each)

Calculate the V_2 of the rocket when it landed on the ground. At the rocket's highest point, it had **no vertical motion**. Assume that the rocket's **time** to go up was equal to the time to come down. Ignore drag. Also acceleration due to gravity is **-9.8 m/s^2** .

Calculate the V_1 of the rocket as it launched. The V_2 of the rocket at its highest point is **0 m/s^2** . Assume that the rocket's **time** to go up was equal to the time to come down. Ignore drag. Acceleration due to gravity is **-9.8 m/s^2** .