## Air Rocket Investigation



You are going to build an air rocket and test how far it will travel.



First, build your air rocket and test it out. You should find out that the distance it travels varies a lot!

What factors do you think affect how far your rocket travels? List below all the possible factors that could affect how far your rocket travels?

Pick which factor you are going to investigate? (The independent variable)

In my experiment I am going to investigate how \_\_\_\_\_\_ affects the distance my rocket travels.

In order to keep my experiment fair, I will have to keep the following things the same for each measurement...

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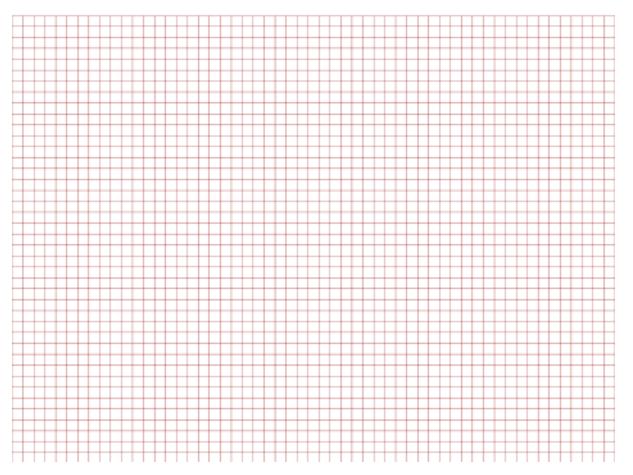
#### Results

For your table of results include your independent variable in the column below and include the units.

For each measurement, take 3 readings and then find the average:

| Your dependant<br>Variable | Distance 1 (m) | Distance 2 (m) | Distance 3 (m) | Average Distance<br>(m) |
|----------------------------|----------------|----------------|----------------|-------------------------|
|                            |                |                |                |                         |
|                            |                |                |                |                         |
|                            |                |                |                |                         |
|                            |                |                |                |                         |
|                            |                |                |                |                         |
|                            |                |                |                |                         |

Plot a suitable graph of your results.





### Observations:

Look at your table of results and your graph. Can you see any patterns? Write them down in the space below:

#### Conclusion:

What can you determine from your results and your observations? What was the best distance your rocket travelled? Why do you think that is?

**Evaluation:** What went well with your experiment?

What did not go well with your experiment? Why do you think that happened?

If you could repeat your experiment, what would you keep the same and what would you change?