**The Paper Airplane Lab**

In class, you’ve learned that the scientific method allows you to solve problems through focused trial and error. In this lab, you will be using the scientific method to figure out how to make an airplane that flies farther than anybody else’s.

**Prelab:**

List the six steps of the scientific method: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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**Procedure:**

1. Make a paper airplane of the type you are most familiar with. (If you don’t know how to make a paper airplane, your instructor will show you.) With your lab partner, measure how far the paper airplane goes each time you throw it.

|  |  |
| --- | --- |
| **Trial #** | **Distance Thrown (don’t forget units)** |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
| **Average distance of all throws:**  |  |

1. What you want to do is make a guess about what might make the paper airplanes fly better. This could be a different method of folding the planes or some addition to the plane design. You may change whatever you like, but remember to only change **one** thing.

In the spaces below, write down how you think you can get a better flight distance using the scientific method.

**Purpose:**

**Hypothesis: (*If… then…)***

**Materials: (ALL materials needed)**

**Procedure: (Step by step directions)**

**Results: (Draw a chart similar to the one on the previous page)**

**Conclusion: (What did you learn?)**

**Postlab Questions: (Attach a separate sheet of paper)**

1. Was your hypothesis disproved or confirmed? Explain, using the information you obtained in your experiment.
2. Do you think this is how scientists conduct their own research? Explain why or why not?
3. Explain why it was important that you change only one thing between your initial experiment and your later experiment.
4. Do you think that the scientific method is a good way to make scientific discoveries? If so, then explain why you think this is. If not, explain why you think it isn’t.