Paper Airplane Challenge

Ask someone at home if it is okay to go to the following site to read about how far a paper airplane can fly.

<https://wonderopolis.org/wonder/how-far-can-a-paper-airplane-fly>

Can you even believe that? Imagine if you could create a paper airplane that would travel that far!

**Your Challenge:** Design a paper airplane, using only one sheet of paper that will travel the farthest distance.

Ask – What do we already know about airplanes that could help us design ours?

Explore -

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| --- | --- |
| What are your variables?These are the parts of your experiment that can change. Like, what kind of paper you use, how you are going to throw it, are you adding weight, the way you fold it. |  |
| What are your controls?What is going to stay the same, every time you fly the plane? i.e. flying indoors, using the same hand, etc. |  |

Plan – Draw a quick sketch of what you want your airplane to look like.

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Create – Now it’s time to create your paper airplane. Then, complete your flight trials. Remember to keep your controls the same. (i.e. throw with the same hand, etc.)

Flight Trials

|  |  |
| --- | --- |
|  | Distance – if you have a measuring tape, measure how far your planes went. If not, you can simply see which one goes farther. |
|  | Throw 1 | THROW 2 | THROW 3 |
| First Design |  |  |  |

Revise – What variable do you want to change? (is something that you want to change about your airplane?)

After changing a variable, complete your second flight trials.

|  |  |
| --- | --- |
|  | Distance – if you have a measuring tape, measure how far your planes went. If not, you can simply see which one goes farther. |
|  | Throw 1 | THROW 2 | THROW 3 |
| Second Design |  |  |  |

Reflect – Was your design successful? What would you do differently next time?

