



Flying Paper Airplanes STEM Activity

Grades 4-8

By Kendra Passarelli

Name: _____ Date: _____ Period: _____

Flying Paper Airplanes STEM Activity

Part 1: Control Trial

Fly your paper airplane a total of 8 times. Record the results.
You must use the SAME airplane for this entire activity!

Control Trials (airplane without modifications)	
Trials	Fly Length (in inches)
Trial #1	
Trial #2	
Trial #3	
Trial #4	
Trial #5	
Trial #6	
Trial #7	
Trial #8	

Part 2: Experimental Trial

Your group will decide on a way to modify (change) the airplane to determine whether or not this modification (change) will make the airplane fly a longer or shorter distance. Sample modifications your group can make: length of the nose, weight of the nose, weight of the wings, weight of the entire plane, etc. **You may only make ONE modification!**

What modification will your group make? _____

Do you predict this modification will make your airplane fly a longer or shorter distance? _____

Part 2: Continued....

Include details about the modifications your group is making below.

- What materials are you using to modify your airplane (ex. tape, paperclips, scissors)? _____
- How many or how much of the materials will you use to modify (be specific)? _____
- To which part of the airplane (wings, nose, entire plane)? _____
- Fly your airplane with the new modification 8 times. **You can NOT make more changes to the airplane**

Control Trials (airplane with modifications)	
Trials	Fly Length (in inches)
Trial #1	
Trial #2	
Trial #3	
Trial #4	
Trial #5	
Trial #6	
Trial #7	
Trial #8	

- Did your airplane fly a longer or shorter distance after you modified your airplane? _____
- Why do you think your airplane flew longer or shorter?
