

Project 5

- Due Apr 5, 2024 by 11:55pm
- Points 50
- Submitting a file upload
- File Types pdf

Due: Friday, April 5, 2024 by 11:55 p.m.

Documents to Submit: PDF document containing your summarized report (see instructions below to indicate what the report must contain).

How to Turn in: Submitted via I-Learn

Instructions:

Each group will fold paper airplanes with 2 factors. The first factor will be two weights of paper (same as Project #3). The second factor will be three designs which can be found on the website

<https://foldnfly.com/#/1-1-1-1-1-1-1-2> ➡ <https://foldnfly.com/#/1-1-1-1-1-1-1-2>.

Student will use the designs Basic Dart, Lock-Bottom, Lift Off (Same as Project #4). This gives 6 treatment groups as follows:

		Airplane Design		
		Basic Dart	Lock-Bottom	Lift Off
Paper Weight	Light			
	Heavy			

Students will create 6 airplanes according to the chart above and then collect data . Each airplane will be flown 10 times and the distance recorded. Make sure to randomize the order of flying the planes as explained in class.

Hypothesis Test – After the planes are built, perform a hypothesis test on the 6 planes. Make sure that each step of the hypothesis test is performed in the correct order, that accurate data is collected and analyzed.

Report – A report of the hypothesis test with each step (including data, data summaries, graphs, Two-Way ANOVA Table, appropriately written decision, etc). No conclusion will be necessary, just the four steps of the hypothesis (State Hypothesis, Gather Data, Evaluate Evidence, Make Decision).

Turn in Report - Upload the final report to Canvas in the place indicated below. Please note that the project will not be accepted late!! Please upload it before the link closes.

Grading

The rubric used to grade this project is below. Please look over this carefully before submitting to ensure that all requirements for this project are met and no points are lost.

Hypothesis Test Rubrics (1)				
Criteria	Ratings			Pts
Hypothesis Test	40 pts Excellent All items of a hypothesis test are present and accurately stated.	30 pts Good A few items are missing from the Hypothesis Test.	0 pts Missing Hypothesis test is missing.	40 pts
Report	10 pts Excellent Report contains all required items.	5 pts Good Report is missing items.	0 pts Missing Report is missing.	10 pts
				Total Points: 50