

1. Create a Title Page

Organized Layout
Student Name
Assignment Name - Paper Airplane Design Challenge
Course - TIJ100
Date of Submission
Teacher Name - Mr. Snyder



2. Written SPICE Report

Overview - In your own words:

Explain in full sentence structure how you followed each stage of the SPICE process
Your answers must relate to your use of SPICE throughout the report

Situation - What is the situation you are facing with this assignment? (1 sentence)

Problem - complete this before proceeding to investigation

- What problems or limitations/restrictions are you **likely** to face during this challenge?
- Must include scientific factors (see link on Lesson/resource page)

Investigate

This section of the report is the most lengthy.

- You will research **a minimum of 4 designs** for consideration to meet this challenge
 - **DO NOT** research 4 designs that are almost identical
 - It is expected that you describe your research process and how you determined which designs to build
- Using the supplied **Thumbnail chart** Include:
 - A photo or sketch of your 4 researched designs (photos & describe what makes each design unique)
 - It is expected you will include details about the unique aspects of each design
 - It is expected you include how each design might be impacted by the 4 forces that impact airplane flight
- Create a **Decision Matrix** (Use chart provided)
 - **Include:**
 - 4 Designs you have researched
 - 4 Criteria that you will observe/measure to determine how well each design satisfies each criteria
 - Rate each design in each criteria
 - Provide final rating scores for each airplane design

Construct - 1 -2 paragraphs

- Describe the construction of your final 2 designs
- What was challenging when constructing each design

Evaluation - Approx. 2 paragraphs

- Describe your evaluation process of your designs.
- What steps is you did you take to test and improve your final design?

3. Critical Analysis questions - answer the following with full sentence structure:

1. What did I do well on this challenge? How is this shown?
2. What did I learn that I did not know before?
3. What areas could I improve on if I had the opportunity to start over?