

Student Astronaut Challenge 2020 - Design Challenge Paper Rubric

Section 1: Introduction of Research Goal	4	3	2	1	0
1. Did the authors describe the goal of the design?	<input type="checkbox"/> Yes	<input type="checkbox"/> Mostly	<input type="checkbox"/> Partially	<input type="checkbox"/> Minor	<input type="checkbox"/> No
2. Did the authors provide sufficient background information about the engineering ideas and concepts behind their design?	<input type="checkbox"/> Yes	<input type="checkbox"/> Mostly	<input type="checkbox"/> Partially	<input type="checkbox"/> Minor	<input type="checkbox"/> No
3. Did the authors make the problem to be solved explicit and explain how goal is related to the background information?	<input type="checkbox"/> Yes	<input type="checkbox"/> Mostly	<input type="checkbox"/> Partially	<input type="checkbox"/> Minor	<input type="checkbox"/> No
Section 2: Design					
4. Did the authors include a diagram of the device?	<input type="checkbox"/> Yes	<input type="checkbox"/> Mostly	<input type="checkbox"/> Partially	<input type="checkbox"/> Minor	<input type="checkbox"/> No
5. Does the diagram include labels to explain the size (mass & dimensions) of the device?	<input type="checkbox"/> Yes	<input type="checkbox"/> Mostly	<input type="checkbox"/> Partially	<input type="checkbox"/> Minor	<input type="checkbox"/> No
6. Did the authors provide a list of sources for their cost estimate?	<input type="checkbox"/> Yes	<input type="checkbox"/> Mostly	<input type="checkbox"/> Partially	<input type="checkbox"/> Minor	<input type="checkbox"/> No
7. Did the authors describe the estimated cost of the materials used?	<input type="checkbox"/> Yes	<input type="checkbox"/> Mostly	<input type="checkbox"/> Partially	<input type="checkbox"/> Minor	<input type="checkbox"/> No
8. Did the authors explain the function of the device?	<input type="checkbox"/> Yes	<input type="checkbox"/> Mostly	<input type="checkbox"/> Partially	<input type="checkbox"/> Minor	<input type="checkbox"/> No
9. Did the authors explain how the device meets the design goal?	<input type="checkbox"/> Yes	<input type="checkbox"/> Mostly	<input type="checkbox"/> Partially	<input type="checkbox"/> Minor	<input type="checkbox"/> No
Section 3: The Conclusion					
10. Did the authors provide a comprehensive summary of their design proposal?	<input type="checkbox"/> Yes	<input type="checkbox"/> Mostly	<input type="checkbox"/> Partially	<input type="checkbox"/> Minor	<input type="checkbox"/> No
11. Did the authors identify the importance and impact their design will have on astronaut health?	<input type="checkbox"/> Yes	<input type="checkbox"/> Mostly	<input type="checkbox"/> Partially	<input type="checkbox"/> Minor	<input type="checkbox"/> No
Mechanics of the Paper					
1. Organization: Is each section easy to follow?	<input type="checkbox"/> Yes	<input type="checkbox"/> Mostly	<input type="checkbox"/> Partially	<input type="checkbox"/> Minor	<input type="checkbox"/> No
2. Organization: paragraphs include multiple sentences?	<input type="checkbox"/> Yes	<input type="checkbox"/> Mostly	<input type="checkbox"/> Partially	<input type="checkbox"/> Minor	<input type="checkbox"/> No
3. Organization: Do paragraphs begin with a topic sentence?	<input type="checkbox"/> Yes	<input type="checkbox"/> Mostly	<input type="checkbox"/> Partially	<input type="checkbox"/> Minor	<input type="checkbox"/> No
4. Grammar: Are the sentences complete?	<input type="checkbox"/> Yes	<input type="checkbox"/> Mostly	<input type="checkbox"/> Partially	<input type="checkbox"/> Minor	<input type="checkbox"/> No
5. Grammar: Is there proper subject-verb agreement in each sentence?	<input type="checkbox"/> Yes	<input type="checkbox"/> Mostly	<input type="checkbox"/> Partially	<input type="checkbox"/> Minor	<input type="checkbox"/> No
6. Grammar: Does the paper contain run-on sentences?	<input type="checkbox"/> Yes	<input type="checkbox"/> Mostly	<input type="checkbox"/> Partially	<input type="checkbox"/> Minor	<input type="checkbox"/> No
7. Conventions: Did the authors use appropriate spelling?	<input type="checkbox"/> Yes (no errors)	<input type="checkbox"/> Mostly (1-2 errors)	<input type="checkbox"/> Partially (3-4 errors)	<input type="checkbox"/> Minor (5-6 errors)	<input type="checkbox"/> No (7+ errors)
8. Conventions: Did the authors use appropriate punctuation?	<input type="checkbox"/> Yes	<input type="checkbox"/> Mostly	<input type="checkbox"/> Partially	<input type="checkbox"/> Minor	<input type="checkbox"/> No
9. Conventions: Did the authors use appropriate paragraphing & capitalization?	<input type="checkbox"/> Yes	<input type="checkbox"/> Mostly	<input type="checkbox"/> Partially	<input type="checkbox"/> Minor	<input type="checkbox"/> No
10. Conventions: Did the authors use appropriate scientific terms and phrases to describe the nature of the investigation and the elements of his/her argument?	<input type="checkbox"/> Yes	<input type="checkbox"/> Mostly	<input type="checkbox"/> Partially	<input type="checkbox"/> Minor	<input type="checkbox"/> No
11. Formatting: Did the authors use APA format ? (click link for APA guide)	<input type="checkbox"/> Yes	<input type="checkbox"/> Mostly	<input type="checkbox"/> Partially	<input type="checkbox"/> Minor	<input type="checkbox"/> No
12. Formatting: Did the authors use 12 point Times New Roman font?	<input type="checkbox"/> Yes	<input type="checkbox"/> Mostly	<input type="checkbox"/> Partially	<input type="checkbox"/> Minor	<input type="checkbox"/> No
13. References: Did the authors cite the work of others, where appropriate, using APA format ? (click link for APA guide)	<input type="checkbox"/> Yes	<input type="checkbox"/> Mostly	<input type="checkbox"/> Partially	<input type="checkbox"/> Minor	<input type="checkbox"/> No
14. Authorship: Did the authors identify the members of the team that participated in the experimental proposal development.	<input type="checkbox"/> Yes	<input type="checkbox"/> Mostly	<input type="checkbox"/> Partially	<input type="checkbox"/> Minor	<input type="checkbox"/> No
Bonus: The solution was creative and unique! (5 points)	<input type="checkbox"/> Yes				
Totals					Total ___/100

Judge feedback for team members:

Additional judge feedback for team members: