Rubric - Infographic - Apollo Division - 2025

Your team has been tasked with finding a **beneficial** use for martian simulant that will lessen the dependence on Earth resources during future Mars missions. NASA refers to this process of In-Situ Resource Utilization (ISRU). ISRU is the harnessing of local natural resources at mission destinations, instead of taking all needed supplies from Earth, to enhance the capabilities of human exploration. Once you come up with your idea, your team is to create an infographic that describes your idea and how you would test it experimentally. You will present your infographic to the judges during the finals.

Commercial companies here on Earth are already researching the uses and benefits of simulants. One of these companies is Space Resource Technologies. Your team should use MGS-1 Mars Global Simulant in your experimental design.

2025 design challenge - infographic rubric - Apollo Division			Please submit all infographics to zoeporterSAC@gmail.com in PDF format by the deadline: January 20, 2025			
design	5	4	3	2	1	0
color scheme font layout	* Layout is organized and uses consistent style * Color scheme has visual appeal and works with content * Fonts are legible and consistent	* Generally good layout * Has minor inconsistency or one distracting element *Color scheme clashes	*Layout could use improvement *Layout distracts from content *Two or more inconsistent elements *Hard to read fonts	*Layout is disorganized *Layout distracts from content *Color scheme is confusing	*No layout or scheme—just random elements, colors, and fonts	*not evident
content	5	4	3	2	1	0
terms facts quality of information quantity of information	*Appropriate terms, vocab, jargon defined and used *Data from good source *More than enough data to make claims *Data clearly demonstrate trend, claim	*One or two terms or jargon used incorrectly or without explanation *Adequate amount of data *Data demonstrate trend, claim, etc *Data from good source	*Not enough terms, vocab, jargon *Data is sparse *Data might not not demonstrate the trend or claim *Data from good source	*Lacking in appropriate terminology *Not enough facts or data *Data is from poor or questionable source	*No real data or facts are present	*not evident

experimental design	5	4	3	2	1	0
presents a problem to be addressed experimental design explained experiment variables are described	*experimental design is detailed, aligns with and addresses a valid problem. Experiment clearly shown and labeled.	*experimental design is missing a few variables or data, and does not completely align with the problem. Experiment shown.	*experimental design is missing many variables and data, only addresses part of the problem. Experimental setup not clear.	*experimental design is not testing the problem. Experimental setup not clear.	*experiment conducted but does not align with or address a problem	*not evident
experimental results	5	4	3	2	1	0
results presented results summarized to indicate if future use is possible visualization matches results	*easy to understand results and summary *explanation of future experiments or uses *Visualizations fit the data and the claim	*unclear summary *unclear results *Visualizations fit the data and the claim	*unclear summary, unclear results *Visualizations are not aligned to results or claim	*Design and visuals are at odds with the content or claims being made	*Design elements and visuals convey a meaning contrary to the intent	*not evident

During the presentation, judges will have a rubric that focuses on use of the infographic to communicate data, the team's Mars simulant use proposal, experimental results, and presentation skills (eye contact, use of slides, all team members contributing, etc).

Please refer to the SDS and Spec Sheet linked to ensure safety when handling martian simulant.