Rubric - Infographic - Apollo Division - 2024

Your team has just landed near the south pole of the moon and are in the process of building a lunar base. Your mission director has tasked your team with finding a **beneficial** use for lunar regolith that will lessen the dependence on Earth resources. 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 will 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 lunar regolith simulants. One of these companies is Exolith labs. Your team should use Exolith's LSP-2 simulant in your experimental design and include a photo of the design as part of your infographic.

2024 design challe	enge - infographic ru	Please submit all infographics to renee.barnett@browardschools.com, in					
D			PDF format by the deadline: Feburary 1, 2024				
design	5	4	3	2	1	0	
color scheme	* Layout is organized and	* Generally good	*Layout could use	*Layout is	*No layout or	*not evident	
	uses consistent style	layout	improvement	disorganized	scheme—just		
font	* Color scheme has visual	* Has minor	*Layout distracts from	*Layout distracts	random		
	appeal and works with	inconsistency or one	content	from content	elements,		
layout	content	distracting element	*Two or more	*Color scheme is	colors, and		
	* Fonts are legible and	*Color scheme	inconsistent elements	confusing	fonts		
	consistent	clashes	*Hard to read fonts				
content	5	4	3	2	1	0	
terms	*Appropriate terms,	*One or two terms or	*Not enough terms,	*Lacking in	*No real data	*not evident	
	vocab, jargon defined and	jargon used	vocab, jargon	appropriate	or facts are		
facts	used	incorrectly or	*Data is sparse	terminology	present		
	*Data from good source	without explanation	*Data might not not	*Not enough			
quality of information	*More than enough data	*Adequate amount of	demonstrate the trend	facts or data			
	to make claims	data	or claim	*Data is from			
quantity of information	*Data clearly	*Data demonstrate	*Data from good	poor or			
	demonstrate trend, claim	trend, claim, etc	source	questionable			
		*Data from good		source			
		source					

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.	is missing many variables and data, only addresses part of the problem.	*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		*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 regolith use proposal, experimental results, and presentation skills (eye contact, use of slides, all team members contributing, etc).

Please refer to the <u>SDS</u> and <u>Fact Sheet</u> linked to ensure safety when handling regolith simulant.