



(	Clearly stated mission goals/purpose(s) (Total score is not weighted – equal to the sum of both items below)							
		To what extent did the mission plan reflect appropriate knowledge of Mars?						
E		All or almost all of the Mars knowledge conveyed in the mission plan was inaccurate/unclear.	Most of the Mars knowledge conveyed in the mission plan was inaccurate/unclear.	There was an even mix of clear/accurate and unclear/inaccurate knowledge of Mars conveyed in the mission plan.	Most of the Mars knowledge conveyed in the mission plan was accurate/clear.	All or almost all of the Mars knowledge conveyed in the mission plan was accurate/clear.		
	KE.	1 point	2 points	3 points	4 points	5 points		
	SCO	To what extent did the presenter(s) reflect appropriate understanding of our knowledge of Mars in their mission plan?						
		All or almost all of the Mars knowledge conveyed in the presentation was inaccurate/unclear.	Most of the Mars knowledge conveyed in the presentation was inaccurate/unclear.	There was an even mix of clear/accurate and unclear/inaccurate knowledge of Mars conveyed in the presentation.	Most of the Mars knowledge conveyed in the presentation was accurate/clear.	All or almost all of the Mars knowledge conveyed in the presentation was accurate/clear.		
		1 point	2 points	3 points	4 points	5 points		

Ca	Carefully designed source of power and control features (Total Score is weighted – equal to the sum of the two items below divided by 2)									
	To what extent did the model reflect appropriate knowledge of space science/technology?									
	All or almost all of the space science/technology knowledge conveyed in the model was inaccurate/unclear.	Most of the space science/technology knowledge conveyed in the model was inaccurate/unclear.	There was an even mix of clear/accurate and unclear/inaccurate knowledge of space science/technology conveyed in the model.	Most of the space science/technology knowledge conveyed in the model was accurate/clear.	All or almost all of the space science/technology knowledge conveyed in the model was accurate/clear.					
R	1 point	2 points	3 points	4 points	5 points					
SCO	To what extent did the pres	enter(s) reflect appropriate kr	y?							
	All or almost all of the space science/technology knowledge conveyed in the presentation was inaccurate/unclear.	Most of the space science/technology knowledge conveyed in the presentation was inaccurate/unclear.	There was an even mix of clear/accurate and unclear/inaccurate knowledge of space science/technology conveyed in the presentation.	Most of the space science/technology knowledge conveyed in the presentation was accurate/clear.	All or almost all of the space science/technology knowledge conveyed in the presentation was accurate/clear.					
	1 point	2 points	3 points	1 point 2 points 3 points 4 points 5 points						



	Features adapted to function in harsh conditions (Total score is not weighted – equal to the score on the one item below)							
		To what extent did the Mars Rover model's design adapt to the physical characteristics of Mars?						
		None of the components of	A few of the components of	Some of the components of the	Most of the components	All of the components of		
		the model's design reflected	the model's design reflected	model's design reflected	of the model's design	the model's design		
		appropriate environmental	appropriate environmental	appropriate environmental	reflected appropriate	reflected appropriate		
	ORE	adaptations.	adaptations.	adaptations.	environmental	environmental		
	SCC				adaptations.	adaptations.		
		1 point	2 points	3 points	4 points	5 points		

Clever/creative task features to accomplish mission (Total score is not weighted – equal to the score on the one item below)						
	To what extent did the Mars Rover model's design fit the mission goals and objectives?					
SCORE	None of the model's design features fit the mission's goals and objectives.	A few of the model's design features fit the mission's goals and objectives.	Some of the model's design features fit the mission's goals and objectives.	Most of the model's design features fit the mission's goals and objectives.	All of the model's design features fit the mission's goals and objectives.	
	1 point	2 points	3 points	4 points	5 points	



Cle	rly written documentation - Rover Guide booklet (Total Score is weighted – equal to the sum of the four items below divided by 2)						
	To what extent did the booklet reflect appropriate knowledge of Mars?						
	All or almost all of the Mars knowledge conveyed in the booklet was inaccurate/unclear.  1 point	Most of the Mars knowledge conveyed in the booklet was inaccurate/unclear.  2 points	There was an even mix of clear/accurate and unclear/inaccurate knowledge of Mars conveyed in the booklet.  3 points	Most of the Mars knowledge conveyed in the booklet was accurate/clear. 4 points	All or almost all of the Mars knowledge conveyed in the booklet was accurate/clear.  5 points		
		T	rledge of space science/technology?	T	T		
SCORE	All or almost all of the space science/technology knowledge conveyed in the booklet was inaccurate/unclear.	Most of the space science/technology knowledge conveyed in the booklet was inaccurate/unclear.	There was an even mix of clear/accurate and unclear/inaccurate knowledge of space science/technology conveyed in the booklet.	Most of the space science/technology knowledge conveyed in the booklet was accurate/clear.	All or almost all of the space science/technology knowledge conveyed in the booklet was accurate/clear.		
ō	1 point	2 points	3 points	4 points	5 points		
Q	1 point	2 points	3 points	T Politics	3 points		
SC	•	klet coherent, organized and	•	4 points	3 points		
SC	•	•	•	Somewhat organized, coherent and well written.	Extremely well organized, coherent and well written.		
SC	To what extent was the boo Extremely unorganized, incoherent and very	Somewhat unorganized, incoherent and	An even mix of organized/unorganized, coherent/incoherent, and well	Somewhat organized, coherent and well	Extremely well organized, coherent		
SC	To what extent was the book Extremely unorganized, incoherent and very poorly written.  1 point	Somewhat unorganized, incoherent and poorly written.	An even mix of organized/unorganized, coherent/incoherent, and well and poorly written.  3 points	Somewhat organized, coherent and well written.	Extremely well organized, coherent and well written.		
38	To what extent was the book Extremely unorganized, incoherent and very poorly written.  1 point	Somewhat unorganized, incoherent and poorly written.	An even mix of organized/unorganized, coherent/incoherent, and well and poorly written.  3 points	Somewhat organized, coherent and well written.	Extremely well organized, coherent and well written.		



## Quality workmanship reflected in the rover model (Total score is not weighted – equal to the sum of both items below) To what extent was the model visually appealing? **Somewhat** visually **Somewhat** visually Very visually unappealing. Neither appealing or unappealing **Very** visually appealing. unappealing. appealing. 1 points 3 points 4 points 5 points 2 points SCORE To what extent was the model constructed with care and good workmanship? Very poor workmanship An even mix of good/poor Somewhat good Very good workmanship Somewhat poor and no attention to detail. workmanship and very workmanship, and high and low workmanship and and attention to detail. little attention to detail. attention to detail. attention to detail. 1 point 2 points 3 points 5 points 4 points

	To what extent was the oral presentation organized and coherent?							
	Extremely unorganized and incoherent.	Somewhat unorganized and incoherent.	An even mix of organized/unorganized and coherent/incoherent.	Somewhat organized and coherent.	Extremely organized and coherent.			
	1 point	2 points	3 points	4 points	5 points			
	To what extent was the oral presentation well rehearsed and prepared?							
SCORE	The presentation was extremely choppy.	The presentation was somewhat choppy.	The presentation was an even mix of smooth and choppy.	The presentation was somewhat smooth.	The presentation was extremely smooth.			
•	1 point	2 points	3 points	4 points	5 points			
	For TEAMS: To what extent did each team member contribute to the oral presentation?							
	Only one team member contributed (or no team member contributed).	Only a few of the team members contributed.	About half of the team members contributed.	Most team members contributed.	All team members contributed.			
	1 point	2 points	3 points	4 points	5 points			



## Mars Rover Celebration Judges Rubric - Rover

The table below describes the original scoring as well as the weighting of scores.

- 1) The **Unweighted Possible Score** is the straight sum of the items in each category.
- 2) Since not all categories count the same in the overall total score for a submission, the **Weighting** column indicates what each unweighted score is multiplied by to create a weighted score that reflects the importance of the category in the overall score for the submission. The following three categories are weighted slightly lower than all other categories:
- a) Carefully designed source of power and control features
- b) Clearly written documentation Rover Guide booklet
- c) Organized and well-rehearsed presentation
- 3) The **Final Possible Score** is the weighted score possible for each category.
- 4) The maximum score for any submission is 55.

SECTION	Unweighted Possible Score	Weighting	Final Possible Score
Clearly stated mission goals/purpose(s)	10	1.00	10
Carefully designed source of power and control features	10	0.50	5
Features adapted to function in harsh conditions	5	1.00	5
Clever/creative task features to accomplish mission	5	1.00	5
Clearly written documentation - Rover Guide booklet	20	0.50	10
Quality workmanship reflected in the Rover model	10	1.00	10
Organized and well-rehearsed presentation	15	0.67	10
TOTAL SCORE POSSIBLE			55