

STEM Design Challenge

Judging Rubric

Middle School

Team # _____ Grade Level _____ Judge # _____

Total Score _____

	4	3	2	1	Score (1-4):
Design	Creative and thoughtful use of K'Nex pieces. Only K'Nex pieces used. Different pieces used in an interesting way. Project meets all parts of challenge. Obvious that a lot of time was spent designing the structure.	Different pieces used. Teams somewhat creative in using the pieces available to them. Obvious that time was spent designing the structure. Project meets all parts of challenge.	Teams somewhat creative in using the pieces available to them. Obvious that the team did not spend much time planning and designing. Project only meets part of the challenge.	Project uses a lot of the same pieces, not a creative use of the pieces available to them. Design is not successful in meeting the challenge.	
Journal	The journal is well-written with no grammatical or spelling errors. All team members worked on it. Outside resources were used which could include teachers, professionals, online or written information.	The journal is well-written with no grammatical or spelling errors. Very few or no outside resources were used in creating their project. All team members contributed.	The journal is lacking detail. Very few or no outside resources were used in creating their project. No evidence of all team members contributing. Information contains some grammatical and/or spelling errors.	The journal contains grammatical and/or spelling errors. No outside resources used. No evidence of all team members contributing.	
Blueprint	Blueprint is creative and detailed. Clear picture of what students are building. Any text is free of spelling or grammatical errors.	Blueprint is detailed but lacks creativity. Clear picture of what students are building. Text is free of spelling or grammatical errors.	Blueprint is lacking creativity or detail. Hard to tell from blueprint what structure teams are building. Text contains some spelling and/or grammatical errors.	Blueprint is not detailed and lacks creativity. It does not convey what type of design students are building. Text contains spelling and/or grammatical errors.	
Teamwork	Team works very well together. Ideas from all members listened to and respected. All team members participated in all aspects of the competition.	Team works well together. All team members are building the structure. It may seem that not all team members are always involved.	Some team members are not working on the structure or not doing as much work as others. Blueprint and narrative show a lack of teamwork.	Some team members are not working on the structure. Obvious that all team members did not participate in the design and preparation for the competition.	
Creativity	Teams were creative in coming up with their project design. Time for building was used effectively.	Project design was somewhat creative. Students finish building before time is up which shows that more could have been added to the structure.	Some aspects of structure are creative but more work could have been done in planning and preparation.	Design lacks creativity. Teams used K'Nex models or kits to create their design. Time was not used effectively.	

Presentation	The team's presentation was well organized, creative and represented their final product. All team members participated in the presentation.	Team's presentation was organized and represented their final product but was not very creative or interesting.	A presentation is given but lacks creativity and organization. More effort could have been given to the presentation.	Team's presentation was unorganized and lacked focus. Not all team members participated.	
Inventory/ Budget	The inventory is presented clearly and is understandable. Pieces added to the inventory are priced appropriately. Students were thoughtful about how their inventory affected their budget.	The inventory is presented clearly and pieces added to the inventory are priced appropriately. The team does not present on how the inventory affected their budget.	A complete inventory is presented and students have appropriately priced added pieces. They may have presented on their inventory but they do not share how the budget would affect their project.	An inventory is completed. The presentation does not include mention of the inventory or the inventory does not include added pieces that are used.	

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Comments: