## STEM Design Challenge
### Middle School

#### Judging Rubric

<table>
<thead>
<tr>
<th>Team #</th>
<th>Grade Level</th>
<th>Judge #</th>
<th>Total Score</th>
<th>Score (1-4):</th>
</tr>
</thead>
<tbody>
<tr>
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#### Design

- **4**
  - 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.

- **3**
  - 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.

- **2**
  - 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.

- **1**
  - 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

- **4**
  - 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.

- **3**
  - 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.

- **2**
  - 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.

- **1**
  - The journal contains grammatical and/or spelling errors. No outside resources used. No evidence of all team members contributing.

#### Blueprint

- **4**
  - Blueprint is creative and detailed. Clear picture of what students are building. Any text is free of spelling or grammatical errors.

- **3**
  - Blueprint is detailed but lacks creativity. Clear picture of what students are building. Text is free of spelling or grammatical errors.

- **2**
  - Blueprint is lacking creativity or detail. Hard to tell from blueprint what structure teams are building. Text contains some spelling and/or grammatical errors.

- **1**
  - 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

- **4**
  - Team works very well together. Ideas from all members listened to and respected. All team members participated in all aspects of the competition.

- **3**
  - Team works well together. All team members are building the structure. It may seem that not all team members are always involved.

- **2**
  - 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.

- **1**
  - 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

- **4**
  - Teams were creative in coming up with their project design. Time for building was used effectively.

- **3**
  - Project design was somewhat creative. Students finish building before time is up which shows that more could have been added to the structure.

- **2**
  - Some aspects of structure are creative but more work could have been done in planning and preparation.

- **1**
  - Design lacks creativity. Teams used K’Nex models or kits to create their design. Time was not used effectively.
<table>
<thead>
<tr>
<th>Presentation</th>
<th>The team’s presentation was well organized, creative and represented their final product. All team members participated in the presentation.</th>
<th>Team’s presentation was organized and represented their final product but was not very creative or interesting.</th>
<th>A presentation is given but lacks creativity and organization. More effort could have been given to the presentation.</th>
<th>Team’s presentation was unorganized and lacked focus. Not all team members participated.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventory/Budget</td>
<td>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.</td>
<td>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.</td>
<td>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.</td>
<td>An inventory is completed. The presentation does not include mention of the inventory or the inventory does not include added pieces that are used.</td>
</tr>
</tbody>
</table>

Comments: