STEAM Kit Project - Judges Form

Grou	p:		
	ο.		

Overview: Students have been asked to create a STEAM kit to teach a 3rd-5th grader about a science concept. To accomplish this, they were placed into teams of three or four to brainstorm ideas, select a design, and prototype their kit. The students also had the opportunity to take their prototypes to Lewis Elementary to get feedback from the students.

<u>Design Requirements</u>: The students took the roles of different stakeholders, such as parents, kids, teachers, etc, to build a list of requirements their kit had to meet. They selected the following requirements for their solutions:

- 1. Needs to cover at least one 3rd-5th grade level science and/or math learning standard
- 2. No harmful or dangerous items in the kit
- 3. Must include at least two soft skill questions
- 4. Has instructions for a third grade reading level.
- 5. Cost is no more than \$50
- 6. Must get 6/10 children interested in the STEAM fields
- 7. Must be able to be cleaned up within at most 10 minutes
- 8. Must take at least 45 but no more than 75 minutes to complete
- 9. They must not be more than 12" by 12" by 6"
- 10. Activities must have roles for at least two children.

Please indicate on the rubrics below where you think the teams score in each category.

Oral Communication:

	6	8	10		
Student Voice	Student • Mumbles or is inaudible	Student	Student Uses appropriate: Pace Tone Volume (voice projection)		
Presence and Interaction	Student Communicates in a way that: Lacks eye contact Slouches, slumps, or presents in a way that lacks confidence Presents the information without any audience engagement	Student Communicates in a positive way: Maintains eye contact Demonstrates positive body language Without attempting to fully engage the audience	Student Communicates in a positive way: Maintains eye contact Demonstrates positive body language Encourages others to be excited about the topic		
Language and Vocabulary	Student Uses little to no academic language that is appropriate to the topic Demonstrates little to no understanding of the topic	Student Uses academic language that is appropriate to their topic with minor errors Mostly understands topic	Student Uses academic language that is appropriate to the topic they are discussing Fully understands topic		

STEAM Kit Project:

	Emerging	E/D	Developing	D/P	Proficient	P/A	Advanced
	6	6.5	7	7.5	8	8.5	9-10
Construction of a Testable Prototype	There is no evidence that the prototype would facilitate testing suitable for any design requirements being objectively evaluated.		Prototype is not constructed with enough detail to assure that objective data on at least one design requirement could be determined.		Prototype is constructed with enough detail to assure that objective data on at least a few design requirements could be determined.		Prototype is constructed with enough detail to assure that objective data on some design requirements could be determined.
Primary Market Research	There is no clear evidence that a plan to collect primary market research was developed.		A plan to collect primary market research was developed but most areas lacked clarity and effectiveness.		A plan to collect primary market research was developed but some areas lacked clarity and effectiveness.		A clear and well-conceived plan was developed for collecting primary market research.
Feedback Analysis - Product Development & Revision	There is no clear evidence that data collected through observations or interviews was used to influence changes to the prototype.		Through the use of observations or customer interviews some data was collected, however, there is little to no evidence that the data was able to influence changes to the prototype.		Through the use of observations and customer interviews some data was collected that was able to somewhat influence changes to the prototype.		Through the use of observations and customer interviews data was collected that was able to inform necessary changes to the prototype.

omments / Notes / Additional Questions <i>(This feedback will be shared with the students.)</i>