**Extension - Class Consensus Scoring Guide**

Question: If you had the time and resources, what is one specific way you would make your design even better? Why would you make that change?

* In the Class Consensus Scoring Guide, you will be reviewing the ideas about energy transformations and engineering design in the SPPA prototypes built and displayed in the “gallery walk”. Your group will share their ideas about one specific way you would make your design even better and why you would make that change. You will also carefully listen to the other groups’ specific design change ideas and take notes.
* **Discuss** with your group:
  + At least TWO sources of evidence from your prototype to support your changes.
  + Use science and engineering vocabulary learned in this lesson in your explanation.
* The **Class Consensus Scoring Guide** on the second page describes important elements that need to be included in your group’s class discussion. Make sure that each component of your group’s discussion meets the standards by paying close attention to the “EXEMPLARY” column of the rubric Scoring Guide.
* When another group is discussing their specific change and why:
  + Listen actively and respectfully. Take notes on each group’s design change and reasoning for the change, even if you disagree with a part of their answer.
  + Ask questions about any part that you do not understand, disagree with, or want to know more about.
  + After the group’s class discussion is finished, read your notes. Put a check (✓) by all ideas that you agree with. Put a question mark (?) by all ideas that you disagree with or are not sure are correct.
* When your group discusses with the class:
  + Clearly explain what you know and how you know it.
  + Your teacher and classmates may ask questions to help understand your specific change and why.

**Class Consensus Scoring Guide Total Score: \_\_\_\_\_\_ of 15**

SPPA Prototype Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Scoring Group Members \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_

Energy Input: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Energy Output: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Beginning  *(2 points)* | Developing  (*3 points)* | Accomplished  *(4 points)* | Exemplary  *(5 points)* |
| **Evidence**  *Did you explain how you came up with each energy transformation idea changes after the Gallery Walk?*  *Are your prototype future changes supported by specific potential and kinetic energy transformations?* | ⏯ No areas of prototype are identified as locations of energy  transformation or labeling  ⏯ Energy  transformations  are not connected throughout prototype  ⏯ Prototype input and output is not  explained  ⏯ Energy  transformations  never added to prototype | ⏯ Supported some energy transformations by location on prototype and labeling  ⏯ Energy transformations are at times connected in prototype but inconsistently  ⏯ Energy transformations in prototype are mentioned but not explained in prototype | ⏯ Supported most energy  transformations by location on prototype and labeling  ⏯ Energy  transformations  are connected in prototype but not from start to finish  ⏯ Energy  transformations in prototype are described generally but not explained thoroughly in  prototype | ⏯ Supported all energy  transformations by location on prototype and labeling  ⏯ Energy  transformations  are connected in prototype from start to finish - to community use  ⏯ Energy  transformations in prototype are described specifically and explained thoroughly in  prototype |
| **Ideas**  *Can your audience easily identify the prototype transformation idea changes?*  *Is it easy to take notes?* | ⏯ New optimized  transformation  ideas are not  identified  ⏯ No explanations  of planned  prototype  changes | ⏯ New optimized  transformation  ideas are mentioned but not clearly identified  ⏯ Some explanations  of planned  prototype  changes | ⏯ New optimized  transformation  ideas are specifically identified  ⏯ Most questions are answered  ⏯ Detailed explanations  of planned  prototype  changes | ⏯ New optimized  transformation ideas are specifically identified and supported by evidence from gallery walk  ⏯ All questions are answered  ⏯ Detailed explanations  of planned prototype  changes include materials list and/or timeline |
| **Knowledge**  *Do you show that you understand the topic of energy transformation well?* | ⏯ No grasp of energy transformations  ⏯ Cannot answer  questions about  the prototype  ⏯ Explanations  frequently incorrect | ⏯ Some grasp of  energy transformations  ⏯ Some questions about the prototype answered  ⏯ Explanations vague, narrow or inconsistent | ⏯ Workable grasp of energy transformations  ⏯ Most questions about the prototype answered  ⏯ Explanations  specific, broad and consistent | ⏯ Trackable, logical grasp of energy  transformations  ⏯ All questions about  the prototype answered  ⏯ Explanations specific, focused and consistent |