Because this activity has been created to accommodate multiple grade levels with various levels of comprehension the 1st Rubric below is to be used by the teacher to get a feel for what it is they want the students to focus on during the Elaboration (Build Challenge) portion of the lesson plan. The second Rubric below is one that covers the same criteria but in a more student friendly language. Feel free to change the rubric requirements or remove some completely to fit your grade level or expectations. Find the Rubrics below. ⬇️

# Plant Movement Design Challenge Rubric

**(Teacher version)**

| | 1 pts | 2 pts | 3 pts |
|---|---|---|---|
| **Followed Directions** | Students didn't follow the directions for the challenge. | Students followed some of the directions for the challenge. | Students followed all the directions for the challenge completely. |
| **Effort** | The students did not use time wisely and/or did not complete a project using problem solving when necessary. | The students used most of their time wisely and worked to problem-solve with some frustration. | The students worked hard to create their project and used time efficiently. Student also showed problem-solving skills. |
| **Creativity** | Students did not create an original idea copying another design identically. | Student's creation is very similar in shape and materials to another design. | Students created an original idea in a unique way. |
| **Functionality** | The model does not replicate observable plant movement. | The model somewhat replicates observable plant movement. | The model clearly replicates observable plant movement. |
| **Knowledge** | Students demonstrate little synthesis of learned knowledge through modeling, utilizing makerspace materials and have difficulty describing the relationship between the model and real world phenomena. | Students mostly demonstrate a synthesis of learned knowledge through modeling, utilizing makerspace materials and can verbally or written describe the relationship between the model and real world phenomena with some difficulty. | Students demonstrate a synthesis of learned knowledge through modeling, utilizing makerspace materials and can verbally or written describe the relationship between the model and real world phenomena. |
| **Communication & Collaboration** | Students had trouble cooperating as a team, communicated was difficult and contributions were unevenly balanced | Students had little problem cooperating as a team, communicated and contributed fairly with some direction. | Students successfully cooperated as a team, communicated and contributed fairly. |

**Student / Team Name: _____**

**Score: _____ / 18**

**Further Feedback:**

# Plant Movement Design Challenge Rubric

**(Student version)**

| | 1 pts | 2 pts | 3 pts |
|---|---|---|---|
| **Followed Directions** | Didn't follow the directions for the challenge. | Followed some of the directions for the challenge. | Followed all the directions for the challenge completely. |
| **Effort** | Did not use time wisely and/or did not complete the build project, problem solving was difficult. | Worked using most of the allowed time wisely and problem-solved with some frustration. | Worked hard to finish the build project, used time efficiently and showed adequate problem-solving skills. |
| **Creativity** | Did not create an original idea copying another design identically. | Build project is very similar in shape and materials to another design. | Create an original build idea using materials wisely. |
| **Functionality** | Model does not replicate the assigned plant movement. | Model somewhat replicates the assigned plant movement. | Model clearly replicates the assigned plant movement. |
| **Knowledge** | Has difficulty relating real world plant movement to the model using specific vocabulary. | Has ability to describe plant movement using some specific vocabulary when relating the model to real world plants. | Has ability to describe plant movement using specific vocabulary when relating the model to real world plants. |
| **Communication & Collaboration** | Had trouble cooperating as a team, communication was difficult and contributions were unevenly balanced | Had some problems cooperating as a team, communicated and contributed fairly with some direction. | Successfully cooperated as a team, communicated and contributed fairly. |

**Student / Team Name: _____**

**Score: _____ / 18**

**Further Feedback:**