Introduction Assessment

Question: How can you build the strongest structure that supports the most weight?

Problem: You have been asked to build a structure that will hold the most weight. However, due to global warming, the only materials we have left to build with is spaghetti and tape! Your group will have to work together to design the best structure and then create a detailed design.

Criteria:

* Option 1: You must design a tower, with a platform, and the platform must hold 1 kg 200 mm off of the table without breaking.
* Option 2: Make a bridge that can support a 1 kg in the middle of a 200 mm gap (see the test structure, the span is the gap between the two books).

Materials list:

Each group needs:

* 100 g of spaghetti
* 200 mm of masking tape
* Other resources as needed but nothing can be apart of your structure besides spaghetti and tape

Structure Specifications

Structure name:

Structure design:

1. Draw a DETAILED picture of your structure that *includes* *measurements* *and labels* in the space below.

Reflection on structure:

\*See rubric for what needs to be included in your reflection. Rubric is on the last page of this document\*

**Intro to Science Unit**

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|  | **4--Surpasses** | **3--Meets** | **2--Approaching** | **1--Below** | **Score** |
| Metric Systems | Student can accurately measure and apply the correct units and convert within the metric system. | Student can accurately measure and apply the correct units. | Student can measure and apply the correct units with minimal errors. | Student cannot measure or apply the correct units. |  |
| Inquiry | Student can provide a description and a labeled diagram with measurement of their project.  Student can describe why the structure failed and tested solution. | Student can provide a complete description or a labeled diagram with measurement of their project.  Student can describe why the structure failed and a written solution. | Student can provide a description or an unlabeled diagram with some measurements of their project.  Student can describe why the structure failed. | Student can provide a generic description with no diagram.  Student can only identify if the structure was a success or failure |  |