

## Pasta Tower Challenge

**Objective:** To build the tallest freestanding tower of pasta with NO other materials, in the time given.

### Materials:

1. Uncooked pasta (any type, and any amount-more is better-BUT you cannot have a mixture of pastas)
2. Some measuring device: ruler, tape measure, your foot.
3. Ability to convert your measurements to INCHES.
4. Tape of any sort.
5. Camera on your device.

### Procedure:

1. In your groups, compare your pasta and make a plan. If one person does not have pasta, they get to bet the one to make design decisions.
2. Choose your pasta wisely! You have a limited time, and want to build the tallest tower.
3. Make a plan to build the tallest tower of pasta. Include your design ideas in this assignment.
4. Begin to build your pasta tower somewhere in which you can capture a picture to post to your assignment.
  - a. ( take a photo with your chromebook or device within this document-go to **INSERT→ IMAGE→ CAMERA**
5. Add up all of your heights, and complete the data table.
6. Add your picture to the Google slides. This is where you will look to compare the designs of others.
7. When your are done, complete the reflection.

### Building criteria:

1. You can alter your materials in ANY way, but your final design CANNOT consist of anything other than **TAPE** and **PASTA** or **MARSHMALLOWS**
2. You can use as MUCH pasta as you like as long as it is the **SAME TYPE**.
3. You can change your pasta mind part way through, but you will have to decide if that is worth the risk to start over.
4. Your final design must be **FREESTANDING** and cannot be supported by or leaning on anything else.
5. When time is up, the building stops.

**Brainstorming:**

This is time to PLAN only! If you build during this time-you will lose time from your build!

My chosen pasta: \_\_\_\_\_

My teammates chosen pasta: \_\_\_\_\_

(if you are absent when we do this in class leave that part blank)

Describe how you plan to build your tower in three bullet points:

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- 
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**Building:**

Capture a photo of your tower and insert here:

**Data table:**

**Highlight** the tallest. (if absent look through the slides and select 3 others)

Name	Type of pasta	Height (INCHES)	Describe the design
Our teams height: (add together) If absent, just record the height of YOUR tower			

**Reflection:**

1. Which designs seemed to work the best?
2. How did you change or alter your design from your original plan?
3. What was the most difficult part of working with limited materials?
4. What ideas did you learn from your teammates?

5. If you had this to do over again, what would you change? (besides more time or materials)