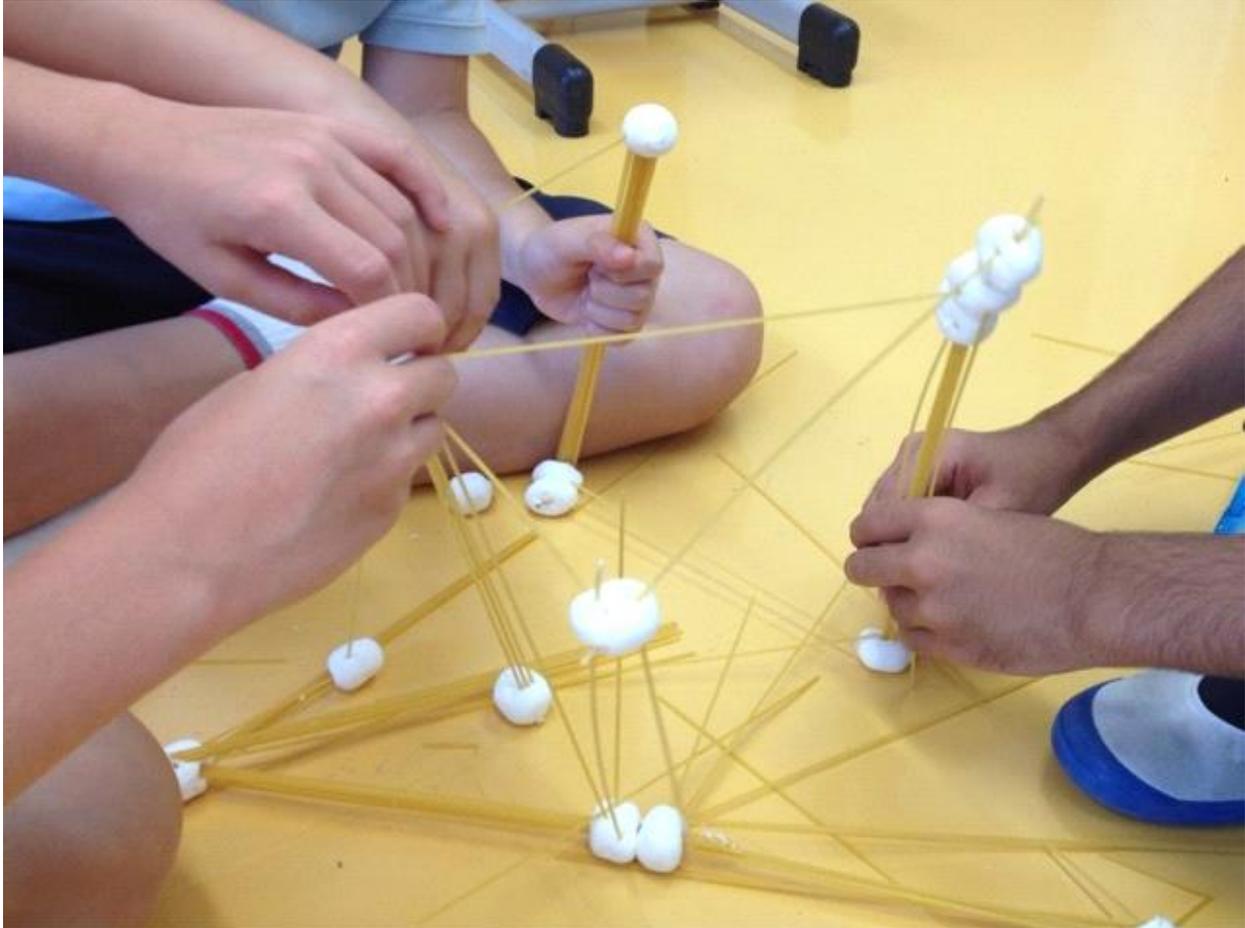




## Marshmallow Spaghetti Tower Challenge



**Objective:** Construct the tallest possible tower using only marshmallows and spaghetti. \*

\* This activity is normally done as a group team problem solving challenge, but can be done independently. We recommend doing this activity as a virtual challenge with other 4-H Club Members while social distancing rules still apply.

### Materials:

- 500g box of spaghetti
- 500g bag of tiny marshmallows



### Instructions:

1. Make the tallest tower possible on a flat surface in **only 20 minutes**, following these rules:
  - ✓ Build tower using **ONLY** the listed materials – tower also cannot be supported by anything else
  - ✓ Breaking spaghetti into smaller pieces is allowed – broken pieces cannot be replaced
  - ✓ The tower must be free standing – needs to stay up for at least 1 minute
2. “Tallest tower” will be based on a vertical measurement from the flat surface, to the top of the tower.

### Discussion Points:

- *How does the base size alter the tower’s strength and height?*
- *What strategies did you use to plan out your tower, or did you simply just start building?*
- *What techniques helped you to make the tower?*
- *How could you improve the tower if you were to make it again?*
- *If you could have remade it, with one extra material, what would it be?*
- *Reflect on how having more time would have changed your tower execution.*

**Did you know?** It’s been proven that children do better in this challenge than business students when does as a group challenge. It’s thought that the act of prototyping or playing is more effective than spending more time planning, which allows less time to execute or alter the design.

Watch this TED Talk “How to Build a Power Team” to learn some of Tom Wujec’s findings from the challenge:

[https://www.ted.com/talks/tom\\_wujec\\_build\\_a\\_tower\\_build\\_a\\_team/transcript?language=en](https://www.ted.com/talks/tom_wujec_build_a_tower_build_a_team/transcript?language=en)