

Title: Marshmallow Challenge

Learning Communication and Innovation through Building

Time: 45 minutes

Grade Range: Pre K – 8th grade



Synopsis: Teams of students are encouraged to experience simple and profound lessons in collaboration, innovation and creativity. The lesson in the marshmallow challenge is that we need to identify the assumptions in our project in order to lead to effective innovation.

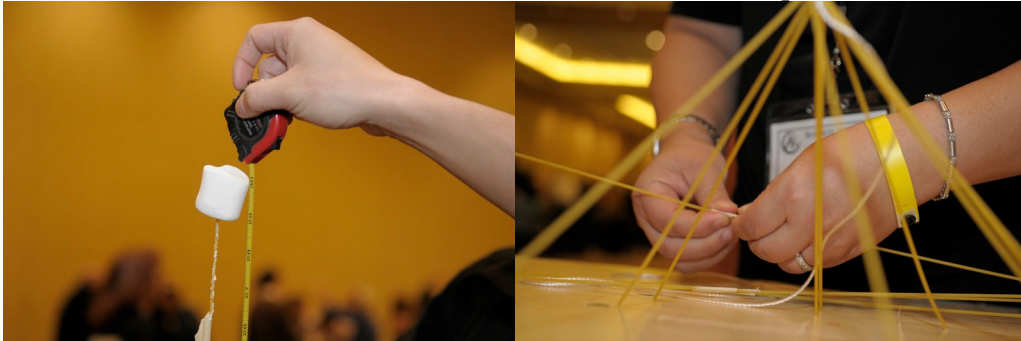
Materials:

- Create a marshmallow challenge kit for each team containing:
 - 20 sticks of uncooked spaghetti (not thin spaghetti of fettuccini)
 - One yard of masking tape (place on side of table or back of chair)
 - One yard of string (easily broken by hand) (or thicker string requires scissors)
 - One fresh marshmallow (standard size)
 - Place materials in a paper bag hiding the contents.
 - Measuring tape for judging
 - Stopwatch: Eighteen minutes is the magic time

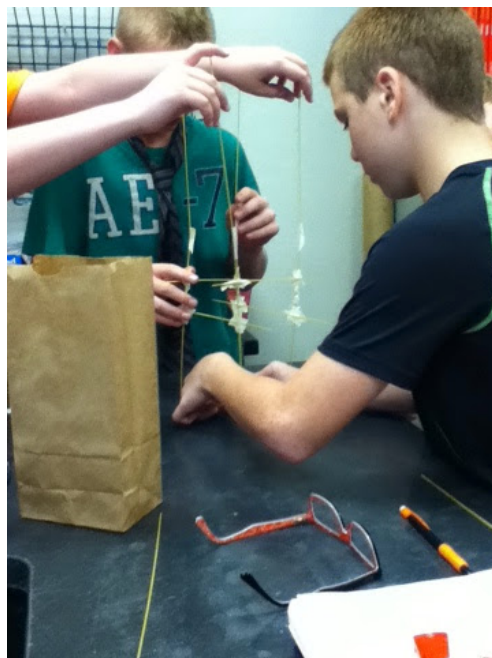
Instructions:

- 1) Be clear about the goals and rules of the Marshmallow Challenge for building the tallest freestanding structure. Don't worry about repeating the rules too many times. Repeat them at least three times. Ask if anyone has any questions before starting.
- 2) The winning team is the one that has the tallest structure measured from the tabletop surface to the top of the marshmallow. That means the structure cannot be suspended from a higher structure, like a chair, ceiling or chandelier. The entire marshmallow needs to be on the top of the structure. Cutting or eating part of the marshmallow disqualifies the team. The team can use as many or as few of the 20 spaghetti sticks, as much or as little of the string or tape. The team cannot use the paper bag as part of their structure. Teams are free to break the spaghetti, cut

up the tape and string to create new structures. Teams cannot hold on to the structure when the time runs out. Those touching or supporting the structure at the end of the exercise will be disqualified.



- 3) After the clock runs out, ask everyone in the room to sit down so everyone can see the structures. Likely, just over half the teams will have standing structures. From the shortest standing structure to the tallest, measure and call out the heights. If you're documenting the challenge, have someone record the heights. Ensure they get a standing ovation and a prize (if you've offered one).
- 4) Describe and discuss some of the key lessons (collaboration, creativity, team building, etc.) What did this activity show you about yourself? What did this activity show you about working as a team?



Source:

www.marshmallowchallenge.com