Spaghetti & Marshmallow Structure Building Activity

Cadettes will complete step 3 of the My STEM Life badge with this activity

Hands-On Activity

The goal of the activity is to create the tallest, most stable structure out of spaghetti and marshmallows. Guidelines for the activity:

- This is a great team project! Work together as a troop to build the tallest, most stable structure possible.
- Want to have a competition? Split the troop into groups to see which team builds the tallest tower. You can also make it a timed event. For example, who can build the tallest tower in five minutes?
- Let's get creative! Think of all the different structures you can build. The possibilities are endless!
- Take lots of pictures.
- Don't forget to have wet wipes handy ...things are going to get a little sticky!
- Most importantly, have fun!! The sky's the limit to what you will be able to build!!

Marshmallow Spaghetti Structure Description

The objective of this contest is to build a structure with spaghetti and marshmallows that can successfully hold a ping pong ball in place. The following constraints must be considered for the structure:

- 1. The base of the structure stays on the table provided
- 2. Spaghetti can be used at any length
- 3. No restriction on the number of spaghetti connected to each marshmallow
- 4. The highest point of the structure should be a marshmallow(s)



Girl Scouts of Orange County My STEM Life badge girlscoutsoc.org/mystemlife

Sample Designs















Materials & Tools

- Marshmallows (small and large)
- Spaghetti
- Table top
- Ping pong balls
- Measuring tape
- You are not allowed to use anything else

Rules

- Check whether you have all materials as described in "Materials & Tools"
- Grouping: students may build the structure individually or as a team
- Each group has 15 minutes to build a structure
- Each group can submit as many structures as they wish

Evaluation

- 1. Height; the tallest structure
- 2. Stability; the strongest structure that can hold the ping pong ball
- 3. Creativity; the most interesting design







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