STEM Challenge: Marshmallow Tower

The Challenge:

A famous architect, named Builder Brad, was assigned a job to make a brand new tourist attraction right here at our school! Unfortunately, he is so busy with all of his other jobs, he needs to contract this job out. Your job is to design and then build a tower as tall as possible with one unique feature-a beautiful, white marshmallow at the very top. Builder Brad will choose the tallest tower to take the job here at school.

Materials:

* 20 pieces of spaghetti per group
* 20 small marshmallows per group
* 1 large marshmallow per group
* 1 foot of tape per group
* 1 piece of paper

Rules:

1. The spaghetti, small marshmallows, and tape can be broken or torn to accommodate the tower.
2. The large marshmallow cannot be modified.
3. The measurement will be taken from the base of the tower to the top of the large marshmallow.  The large marshmallow can be anywhere in the structure but I will only measure to the top of it.
4. You will have a 5 minute planning period to sketch a blueprint of your design.
5. You will have 35 minutes to build your tower.