### EVENT 6: SPAGHETTI MARSHMALLOW TOWER

(Dated 9/2021)

**OBJECTIVE:** To construct the tallest tower that will support a load of at least 375 grams

**RULES:**

1. The tower must be designed and constructed entirely by the entrants from one box (500 grams) of commercially available spaghetti made only from semolina or flour and water with a diameter of not greater than 3.0 millimeters. No other form of pasta, such as fettuccine or bucatini (tubular spaghetti), is permitted
2. The spaghetti may only be joined together using min-marshmallows.
3. Glue or any other material may not be used to coat the strands of spaghetti or the marshmallows
4. The spaghetti may be cut.
5. The marshmallows may not be cut.
6. The tower must be free standing: no part of the structure may be attached to any surface.
7. The top of the tower must be able to accommodate a load of at least 335 grams in the form of 3 rolls of 50 pennies each. Pennies dated after 1982 with a mass of 2.50 grams are to be used.

COMPETITION AND SCORING:

1. The competition area may either be an all-purpose room cafeteria or a typical high school classroom containing tables or desks.
2. The tower will be placed on a desk or on a tile floor.
3. The team will have 5 minutes to assemble their tower.
4. Once assembled, the team will notify the judge(s) that their entry is ready to be tested.
5. The judge will measure the height of the tower in centimeters.
6. Once measured, the team will place three rolls of pennies, as described above, one at a time to the top of their tower. The team is responsible to provide their own pennies.
7. The tallest tower that can support this load wins.
8. In the case of a tie, the tower will be required to support additional pennies. The team will have 5 minutes to add additional pennies one at time until the tower fails. It is the team’s responsibility to ensure that the top of their tower can accommodate additional pennies.

**SCORE =**  (Your height in centimeters) X 100 points

(Winning height centimeters)

**DISQUALIFICATION SCORE =** Ten points less than the lowest score for a qualifying tower that holds at least one roll of pennies but not less than zero. A qualifying tower meets the rules but does not hold the required load.

Testing procedures & scoring may need to be modified if the Olympics is held virtually.

*Updates to the rules and Forum discussion / questions with answers are available by going to the NJAAPT website:* ***njaapt.wildapricot.org*** *(top menu, “Events” and “Forum”).* *It is the team’s responsibility to periodically check in or inquire about changes and clarifications to the rules.*