

## Tipsy or Not? Hands-On

### Part I

5 minutes to build a structure with provided materials.

### Pt. II

- The judge will place cup and platform on top of structure.
- Team will have one minute to place nails in cup and see how many nails can be placed in cup before cup tips/falls over and nails fall out.
- The structure, the cup and platform must stand on its own while the nails are being added.
- Team may start over if cup tips/falls over during the one minute.

### **Points:**

Up to 10 pts. for teamwork

5 pts for each nail still supported in the cup placed on top of the structure counted at the end of the one minute in Pt. II.

10 points if all materials are used in structure

***Alternate Bonus Points for Div. II teams or Experienced Div. I teams***

20 points if all materials are used in structure  
And provide weight support functionality

## **“Tipsy or Not” Judging Instructions:**

1. Read problem to team and provide them 2 copies to read along.
2. In step II, show them the cardboard platform (for new teams emphasize the flat surface), the cup and the nails that will be used.
3. Make sure to read the correct bonus point option for them; new primary and Div I teams should go for the 10 point bonus while experienced teams and Div II teams should go for the 20 point bonus.
4. Start the timer for 5 minutes and take questions throughout but don't instruct on any solution.
5. After 5 minutes, have them stop and place the cup on the platform, on their structure.
6. They have 1 minute to put nails in the cup.
7. Keep track of how many nails are placed and supported in the cup – it may topple at any moment!
8. If it topples, and they still have time left, ask them if they want to keep trying to improve their score (a new total, not an aggregate)

### **Things to coach them on:**

1. To start out ask if team has a designated Reader. If not, have team select one (just for today, not a permanent assignment). The reader should then be the one who picks up the hard copy of the problem and reads along to themselves as you read the problem aloud. Give whatever assistance is needed to primary team members.
2. The 2<sup>nd</sup> copy of the problem will hopefully be picked up by another team member. For Div II teams and experienced teams, remind them about this “opportunity” if they don't act on it themselves.
3. The absolute key to hands on problems is being able to understand what the problem is asking them to do and how to maximize point attainment. The role of the reader is critical here.
4. Nudge any reluctant or shy team member to pitch in with either actual hands on building or at least to contribute ideas.
5. Encourage team members to listen to each other, to acknowledge each others suggestions and to try ideas out!
6. You can let the teams know when one minute remains in Part I and when 10 seconds remain in Part II.
7. Always emphasize what they did well, especially good communication like, “good idea, but let's try this instead”.
8. Be prepared to tally team scores; they will quickly hone in on wanting to score better than other teams participating.