North Carolina Odyssey of the Mind Eastern Region

2010 - Problem D - Judge's Copy

Spontaneous Problem: The Suspended Fruit

A. When the team enters the room, tell them, "This is a Hands-On problem. In an actual tournament you would have one minute to select five team members to compete. The others would leave or stay to watch, sitting in seats away from the table. If they stayed in the room, they could not assist in solving the problem and could not talk at ANY time."
Note To Judge: All team members can participate in the Spontaneous Fair.

B. JUDGE READS TO TEAM:

1. You will have 3 minutes to brainstorm together. You may speak with each other but you may not touch the provided materials during that time. Then you will have 5 minutes to create your solution.

2. Your problem is to suspend raisins such that the bottom side of the object holding the raisins does not touch any object. The raisins may not be pierced.

3. Scoring:
Your solution will be scored when time is expired or if you ask to be scored sooner.
2 points for each suspended raisin.
10 points if the bottom of the lowest suspended raisin is more than ½ inch above the table.
20 points if the bottom of the lowest suspended raisin is more than 2 inches above the table.
40 points if the bottom of the lowest suspended raisin is more than 4 inches above the table.
0-20 points based on how well your team works together.
0-10 points on the creative use of the Ping Pong Ball.

4. Once again, your problem is to suspend raisins such that the bottom side of the object holding the raisins does not touch any object. The raisins may not be pierced.

C. FOR JUDGES ONLY

1. Teams may only use these materials for their solution:
   - Box of ~50 raisins
   - one 8 ½" by 11" sheet of paper
   - 4 inches of masking tape on plastic wrap
   - 10 toothpicks
   - 2 straws
   - 4 paper clips
   - 1 Ping Pong Ball

2. They can use the raisin box.

3. Their solution must be free standing – no one touches it during scoring.

4. Answer any of their questions but don't volunteer any of the above information.

North Carolina Odyssey of the Mind Eastern Region

Team Copy

1. You will have 3 minutes to brainstorm together. You may speak with each other but you may not touch the provided materials during that time. Then you will have 5 minutes to create your solution.

2. **Your problem is to suspend raisins such that the bottom side of the object holding the raisins does not touch any object. The raisins may not be pierced.**

3. Your solution will be scored when time is expired or if you ask to be scored sooner.

2 pts for each suspended raisin.
10 pts if the bottom of the lowest suspended raisin is more than ½ inch above the table.
20 pts if the bottom of the lowest suspended raisin is more than 2 inches above the table.
40 pts if the bottom of the lowest suspended raisin is more than 4 inches above the table.
0-20 pts based on how well your team works together.

Scoring for The Suspended Fruit

Each suspended raisin x 2pts =
Bottom raisin >1/2” 10pts =
Bottom raisin >2” 20pts =
Bottom raisin >4” 40pts =
Team work: 0 – 20 pts =
Ping Pong Ball: 0 – 10 pts =
---------- + --------
Total Points:

Scoring for The Suspended Fruit

Each suspended raisin x 2pts =
Bottom raisin >1/2” 10pts =
Bottom raisin >2” 20pts =
Bottom raisin >4” 40pts =
Team work: 0 – 20 pts =
Ping Pong Ball: 0 – 10 pts =
---------- + --------
Total Points:

Scoring for The Suspended Fruit

Each suspended raisin x 2pts =
Bottom raisin >1/2” 10pts =
Bottom raisin >2” 20pts =
Bottom raisin >4” 40pts =
Team work: 0 – 20 pts =
Ping Pong Ball: 0 – 10 pts =
---------- + --------
Total Points:

Scoring for The Suspended Fruit

Each suspended raisin x 2pts =
Bottom raisin >1/2” 10pts =
Bottom raisin >2” 20pts =
Bottom raisin >4” 40pts =
Team work: 0 – 20 pts =
Ping Pong Ball: 0 – 10 pts =
---------- + --------
Total Points:

Scoring for The Suspended Fruit

Each suspended raisin x 2pts =
Bottom raisin >1/2” 10pts =
Bottom raisin >2” 20pts =
Bottom raisin >4” 40pts =
Team work: 0 – 20 pts =
Ping Pong Ball: 0 – 10 pts =
---------- + --------
Total Points:

Scoring for The Suspended Fruit

Each suspended raisin x 2pts =
Bottom raisin >1/2” 10pts =
Bottom raisin >2” 20pts =
Bottom raisin >4” 40pts =
Team work: 0 – 20 pts =
Ping Pong Ball: 0 – 10 pts =
---------- + --------
Total Points:

Scoring for The Suspended Fruit

Each suspended raisin x 2pts =
Bottom raisin >1/2” 10pts =
Bottom raisin >2” 20pts =
Bottom raisin >4” 40pts =
Team work: 0 – 20 pts =
Ping Pong Ball: 0 – 10 pts =
---------- + --------
Total Points:

Presenter's Notes

Wow! We had fun today and saw great teamwork and creative solutions! There were raisin trees, raisin boats, raisin hats and raisin (candy) cane. I never realized just how *sticky* raisins can be ;-)

This problem was practiced mostly by division 1 and a few division 2 teams. On the surface it appears as a simple hands-on build-some-kinda-structure problem. And it is. However, there are some interesting features that highlight different aspects of a team's performance.

During the "Brainstorm Time", the kids can talk and look at the provided materials but can't touch them. The urge to immediately play with the supplies is hard to control – especially for young teams. But this is exactly what is needed for a team focused solution. By leaving all of the supplies in the middle of the table, each person is able to *see everything*. Nothing gets squirreled away at one corner of the table or falls on the floor. The kids naturally want to react and since touching is off limits, they talk to each other. Within a few minutes they have one or more plans to work from.

During the building phase, they pick a plan or two and attempt to implement it. Due to the flimsy nature of the materials (straws, thin toothpicks, paper, etc) it's very difficult for one person to hold all the pieces in place and build a reasonable solution. This almost forces kids to work together.

The ping pong ball doesn't appear to be useful in this problem. Yet it serves two purposes. It's very distractive. A number of kids played with the ball bouncing & rolling it around often to the floor. They lost focus of the problem and at times distracted their team mates. On the flip side, some teams used it creatively as: a stabilizer inside a paper tube; broken open and used as a raisin cradle; like a flower with raisins stuck to or with paperclip petals bearing raisins. Note that the kids were not told about scoring the ball. *At competition they are informed of all scoring elements*. We used this hidden element today just to see how the kids would naturally react to an unusual item.

As written, most spontaneous problems have a few vague components. This encourages questioning and risk taking. In a real tournament, the judges will anticipate most of the questions before any competition starts. They will decide: if the ball can be damaged, the paper torn, the "bottom" of an object, etc. Today, nearly every team asked the judges good questions. Some of the most interesting: If there are 3 groups of suspended raisins above ½ inch does each group qualify for points? If all the raisins are above 4 inches, do they get points for 4 inches, 2 inches and ½ inch? Are there any bonus points for using the ping pong ball? Does the solution have to be free standing? Can the raisins be pierced to "glue" toothpicks together but not be counted for score?

Over 260 team members performed The Suspended Fruit today. Across all age groups, we saw an unprecedented amount of teamwork and cooperation! They came up with building plans and did their best to implement them. Not every team's solution was successful at suspending raisins but nearly every team was able to verbalize a plan or two and set about building it. The most important lesson is that just because a plan falls apart doesn't mean the team falls apart.

Thanks for participating. Enjoy these inquisitive and wonderful kids!

Zeke Zecca
NCOM-ER