

## Spontaneous Problem: Buckets

- 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 could 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. This problem is in two parts. In part one you will have 5 minutes to plan and practice your solution, and in part two you will have 4 minutes to perform your solution. You may ask questions at any time, however, time will continue.
2. This bucket must be placed here like this (point at it) when part 2 starts. During part 2, you must all stand behind this line (point at it) ten feet from the bucket.
3. Your problem is to get as many of these cotton swabs into the bucket as possible, using only the materials provided (indicate the materials).
4. Scoring will be as follows:
  - 1 point for each swab that ends up in the bucket.
  - 1-5 points for the creativity of your swab delivery system.
  - 1-15 points for teamwork.
5. Once again, your problem is to get as many of these cotton swabs into the bucket as possible, using only the materials provided.

C. FOR JUDGES ONLY

1. Setup - place a bucket on the floor. Use tape or equivalent to draw a line ten feet away from the bucket.
2. Give each team a set of the following materials to use in their solution: 12 10" pieces of string/yarn, 4 paper clips, 4 straws, 2 pieces of printer paper, 12" of masking tape (or several mailing labels, 50 cotton swabs.

HINTS:

1. The problem doesn't prohibit the team from throwing multiple cotton balls at once (from multiple team members) OR combining the balls together (all 50 at once tied together)
2. The problem doesn't say the bucket can't be modified in part 1 (it can't be moved though). The paper could be used as a backboard
3. While the team may not cross the line, other materials could. The string could be attached to the balls to retrieve them if a throw is missed. Combined with the fact that multiple balls can be combined in hint 1, the team could attempt all 50 at once several times...

## Team Copy

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2. This bucket must be placed here like this when part 2 starts. During part 2, you must all stand behind a line ten feet from the bucket.
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## Scoresheet - Buckets

Number of Swabs in Bucket	_____	
Creativity of Solution (1-5)	_____	
Teamwork (1-15 points)	_____	+
Total points	_____	=

Comments:

## Scoresheet - Buckets

Number of Swabs in Bucket	_____	
Creativity of Solution (1-5)	_____	
Teamwork (1-15 points)	_____	+
Total points	_____	=

Comments:

## Scoresheet - Buckets

Number of Swabs in Bucket	_____	
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Comments: