

ODYSSEY OF THE MIND

Spontaneous Tips

Spontaneous problems are an important part of the Odyssey of the Mind experience. Approximately one-third of the final tournament score is determined during a 10 to 15-minute period in the Spontaneous problem room. Here are some suggestions to help make your team's trip through Spontaneous more fun and rewarding.

1. **Practice as many Spontaneous problems as possible.** The more practice the easier the time will be for the team on competition day.
2. **Work on good listening skills** - both to listen to other team members and to the directions. (Many teams do poorly in the competition room because they did not listen to the instructions).
3. **Don't argue during a Spontaneous problem.** It just wastes time.
4. Practice giving answers loudly and clearly. Make sure the judges understand the response. Judges are human and can misunderstand a response which means they might score it as common when it was creative.
5. **Have team members take turns scoring and timing practice sessions.** This helps them see and hear the difference between creative and common answers.
6. **Practice brainstorming techniques:**
 - No criticism - withhold judgment of ideas. Ideas are not evaluated during the brainstorming process. A critical remark or laughter from another person stops the free flow of ideas.
 - Quality is desired. Larger the number of ideas, greater the chances of reaching best solution.
 - The wilder the better. Asking for far-reaching ideas encourages group members to expand and be imaginative.
 - Hitchhiking/Piggybacking is encouraged. Team members should be encouraged to combine or modify ideas of others. This leads to the improvement of ideas.
7. Don't assume your team will be given a verbal or non-verbal Spontaneous problem relating to the type of long-term problem the team has chosen to solve. Any long-term problem may be given any type of Spontaneous problem at the tournament

8. **Don't waste time trying to think of a creative response** if the team member has a common one. Give the common response and perhaps it will stimulate other team members to give creative responses.

9. **Practice teamwork skills.** Many of the problems have bonus points given on how well the team works together.

10. **Listen to the problem carefully.** If the 'NO' word is not used, take a chance. Judges watch for risk takers when scoring creativity.

11. **Practice on other types of communication besides verbal:** American sign language, special gestures, etc. These can be used when the problem says verbal communication is not allowed.

12. **Try tension-relieving exercises.** Many teams are very nervous before they enter the Spontaneous area. Back-rubs, shaking of arms and legs, rolling of heads, telling of simple jokes to arouse laughter, are all ways to reduce tension. Also be careful with the pep talk as the team is ready to enter the competition room. Sometimes this puts more stress on an already stressed-out team. A relaxed team does much better in the competition room.

13. **Work on a team-uniting event such as:**

- A special team Spontaneous hat or uniform or,
- A special song or cheer to greet the judges when they enter the problem room (not more than 15-20 seconds) or,
- A special signal or activity for the team to give when they are called for their problem (not more than 10 seconds).

14. **Make sure the team is aware that a copy of the problem is placed before them** as it is read. They may consult it anytime while they are working on a solution to the problem.

Speed Control

In an effort to force teams to be more creative, several methods to control the speed in the way verbal responses to Spontaneous problems are given have been created. Here are some types of answering systems that have been used in the past. Teams may practice responding to Verbal or Verbal Hands-On problems using these systems.

Playing Cards

Assign each of the five team members a number from 1 to 5. Use only the Ace through 5 from one or more decks of playing cards. Shuffle the cards and place them face down in front of the team members. The coach will turn over the first card. The card number (Ace = 1) designates which team member will then answer. After responding, that team member will then turnover the next card and so on. When all the cards are used, the deck is then turned over and the team continues until time runs out. 3 x 5 CARDS Each of the five team members is given 8-10 cards. When a team member gives an answer, a card is put into a container placed before the team. When all cards are used the team is finished responding, even if time remains on the clock. If a team member is unable to answer, a card is placed in the container also. If there are fewer than five team members, distribute the cards for the missing team members to the others. A variation is to place a stack of 35 cards (or any amount divisible by five) on the table. A card is placed in the container after each response. If the team member is stuck, the whole team is stuck. Another variation is that if the team member is stuck, a card is placed in the container and the team continues responding to the problem. A third variation, instead of using 3 x 5 cards, use beans, macaroni, checkers, or small blocks of wood. PASS CARDS Five PASS cards are placed before the team. If a team member is unable to answer, a PASS card is given to the judge (coach). If all PASS cards are used before time runs out, if a team member is stuck, the whole team is stuck. At the end of the time period, two points are added to the final score for each unused PASS card.

Paddle

Place a Ping-Pong paddle on the table. Before giving a response the team member must pick up the Paddle and hold it over his/her head. After giving the response, the team member places the Paddle on the table before the next team member who is to respond. A variation is to place the Paddle on the table and any team member may pick it up to respond. The same team member may not respond twice in a row. The Paddle must be placed on the table before the next team member may pick it up and respond.

Ruler: Use a Ruler in the same manner as the Paddle described above.

Removal

Put 35 cards (or beans, macaroni, or wood blocks) in a container and place it on a table in front of the team. Each team member is to remove one item from the container before giving a response. When all items are removed from the container or time runs out (whichever is first), the team must stop. If a team member is stuck, the whole team is stuck.

Dice

Assign each team member a number from one to five. The coach will roll the dice the first time. The team member with the number showing on the dice will give a response. After giving the response, the team member will roll the dice. The team member whose number appears will then respond, and so on. If the number six appears, the team member who rolled the dice must respond again. If it is on the first roll, the coach will select the team member to respond.

Tips for coaches about VERBAL spontaneous problems:

You can help the team in any way when you practice spontaneous. Unlike Long Term, Spontaneous has no outside assistance constraints except on the day of the tournament in the competition room (if non-performing team members help the five who are performing, they will receive a penalty.)

Only five team members perform on tournament day, and your team may wish to choose a different five for verbal than non-verbal. They will be given one minute after they enter the room, and are told the nature of the problem, to decide which five will participate. In practice sessions, you may wish to have five give answers and the other team members keep score, rotating who participates. Keeping score helps team members learn to recognize "common" and "creative" answers when they hear them, which, in turn, helps them recognize common and creative when they think of them!

Practice many ways of taking turns giving answers: start with simply going around the circle and advance to flipping cards, limiting answers, spinning a spinner, rolling a die ... any methods that help a team be prepared for giving answers in any order. You can take away some of the mystery by making the challenge fun: think of creative ways to choose who gives an answer --- assign a color to each team member and let them close their eyes and draw M&Ms out of a bowl to see who will respond (and person drawing the M&M gets to eat it)

Practice the flow of responding. Start with a simple exercise ... even just everyone saying his or her name over and over again. Advance to "name things in a kitchen," or "name things that are blue" ... anything the help the team see what giving answers one after the other feels like and sounds like.

Practice what to do if "one member of the team is stuck." ANYONE can have trouble thinking of an answer sometimes, and all the team members need to feel comfortable with that moment of panic. Have them practice saying almost anything. Let them see that they can think up SOMETHING and say it, and have them focus on that something, rather than on the feeling of panic)

Practice what to do if the official says "duplicate ... give another response" or "inappropriate ... give another response." Say this sometimes even if the answer is NOT a duplicate. Make this almost a game --- you never know when coach is going to make you think of another answer!

Most importantly for verbal spontaneous success, have the team members learn about many different subjects (read magazines or books, listen to music, learn about subjects that interest them.) Then let them practice making connections between those subjects and other one. You can make a game out of this by writing on cards and matching them. For example, make up cards appropriate for age and grade level that have colors, shapes, numbers, or, for older teams, abstract ideas, etc., and another stack of cards that have names, subjects, news items, etc. Then let the team practice matching the cards. For example, how is the number 3 like a dog? (Simple (Primary or division 1) answer: "my aunt has 3 dogs;" more advanced (divisions 3 or 4) answer: "Cerberus") How is the color red connected a circus? (Simple answer: "The big top has red stripes;" more advanced answer: "Romans had a saying that they longed for two things ... bread and circuses." By practicing making unusual connections, teams will begin to learn how to "think outside the box" to come up with more creative answers.

ALWAYS praise good answers, and encourage the team members to tell which answers they heard they liked (after they finish a problem). This way, over a period of time, all team members will receive positive feedback about answers they have thought of, and this will build confidence.

Keep practices fun!!! This is about learning to think on their feet, and team members should see this as a fun challenge, not a stressful situation!!! At the tournament, the most successful teams are the ones who are having a lot of fun, and who see spontaneous as an opportunity to show off their creativity. The coach often sets the tone for this attitude, so make spontaneous an enjoyable activity and if you, as a coach, feel concern about the team's ability, figure out other ways to practice, keeping things fun and not stressful.

Verbal Problems

Here are some suggested verbal Spontaneous problems that may be used for practice. Give the team members one minute to think about their answers.

Then give them three minutes to answer. Afterwards allow the team members to discuss their answers and determine if more creative responses are possible. **NOTE: Some of the questions have suggestions in brackets for other possible ways of asking the question.**

1. Suppose you have just cleaned out your closets and have a big pile of shoes that you hate to throw away. What would you do with them? (hats)
2. List something you can do with your feet that you can also do with your hands.
3. List a reason for not wearing shoes (for wearing shoes).
4. List a use of a football that is not related to sports. (Baseball, basketball)
5. List something to think about while taking a walk.
- 6 Give a reason why someone might come running from the woods, shivering from fright.
7. List an item you might put into your footlocker and give a reason why.
8. What do you do with your feet besides walk or run?
9. List things that might make your Mom or Dad happy.

10. When you go outside to catch the bus, you notice that a friend has red paint splashed all over his shoes. What explanations might you give for this?
11. You just found out that your mom is running for Mayor. What would be her campaign slogan?
12. You are a guide in the Grand Canyon. You are about to start a trip down into the canyon. List one of the supplies you should take with you and why.
13. If you organized a professional football team, what would you call it?
14. Play-Doh is a name that really describes the product. Name another product with a very descriptive name.
15. Invent your own ice cream flavor. List the ingredients in your new ice cream.
16. List things that describe a square. (Circle, Rectangle)
17. Describe a pain in the neck.
18. List things that need horns. (Bells, whistles)
19. What might you find on the path to fame?
20. What would you fit into a 10-foot cube?
21. List things that could make this month colorful. (Substitute other months)
22. What advice would you give Christopher Columbus?
23. Name things you think should become extinct.
24. Think of an improvement you could make to your school desk.
25. What is very scary?
26. Why didn't Noah take any Gila Monsters on the Ark.
27. Hands! Hands! Hands! Think about it and you will realize that there are many different types of hands. List as many varied hands as you can.
28. Suppose you had the power to change or modify the human hand in any way you wanted. What changes would you make?
29. List things you can do while blindfolded.
30. Describe your right (left) shoe.
31. Look at an old, used-up ball-point pen and list new, unusual, clever uses you can find for it.
32. List a bumper sticker for a space shuttle.
33. List things that are slippery.
34. What would you do with a leprechaun's gold.
35. If school were a game, what would be its name?
36. For what would you like to be last in line? (First in line?)
37. Name shapes found in nature.
38. The answer is "Yes, Always." What is the question?
39. At what time would you like a clock to stop and why?
40. List something you like about school.
41. I like to dream about _____.
42. Name something you would deposit in the bank.
43. I like _____ when I take a break.
44. List things that make you say "Mmmmmmmmm."
45. Give the story of your life a title.
46. What would you like to add to your bike?
47. List a question that you would always answer "No." (Yes)
48. If you were a space traveler, name a favorite stop.
49. List things round about.
50. List something that you could see during a minute trip through your school.
51. What can be close yet distant?
52. Time seems to go faster _____?
53. List things that should last forever.
54. Name things that sparkle and glitter near midnight.
55. List things that whistle.

56. Create a school bumper sticker for a non-honor student.
57. List the most messy things.
58. Everyone should learn to _____.
59. What should never be left unplugged.
60. Name other uses for a football goal post.
61. Name things that would just fit inside a soccer ball.
62. Super school would be?
63. Name something unusual that you would keep in your book bag.
64. What's really funny?
65. Once is enough for what?
66. Write a bumper sticker for your hat.
67. What gives you goose pimples.
68. How far is far enough?
69. When is large little?
70. It is OK to _____?
71. What happens in a story when the bell rings?
72. Name things you like to touch.
73. List things said 1,000 times.
74. List the sounds of an April shower. (Substitute other months)
75. Describe reflections in a puddle.
76. Name things from which you need a break.
77. List unusual shapes and colors you see in your school.
78. What do you not like to wait for?
79. When could 7 and 11 be unlucky?
80. What is something a first-grade student should know?
81. List your favorite thing about May. (Substitute other months)
82. Mayday! Mayday! What could be happening?
83. Round is smarter than square because _____.
84. What seeps in?
85. Describe situations when out is in.
86. Name something that is about the size of your school.
87. List words that encourage you to try harder.
88. _____ makes me feel special.
89. Name something that you hope will never change.
90. For what would you like it to be your turn?
91. If you blink you might miss _____.
92. What will shoes be like in 100 years?
93. Mini (a prefix) means small. List some unique "mini" words.
94. The answer is "Who cares." What is the question?
95. List ways to catch water from Spring rains.
96. List things that march.
97. What would you like to say to Space?
98. List some math problems a NASCAR driver might have to solve.
99. Using words with "T," describe Thursday. (Substitute letters for other days of the week.)
100. I wish I could _____ for just two minutes.
101. Name things that come in 2s. (Substitute other numbers up to 12.)
102. List some things that you do that would drive your coach crazy.
103. Name a subject you would like taught in school and tell why.
104. List gifts you would like (not) to receive.
105. List places to go on field trips.
106. For what would you trade an old bicycle, a new T-shirt and five dollars?

107. Name some absurd combinations.
108. The answer is "very, very cold." What is the question.
109. List things that overlap.
110. List things that are mean and green.
111. What should a plan for a December alien arrival include?
112. Why should snowballs be given happy faces?
113. List things that make you grin.
114. List things that are eight right or wrong.
115. List things that make you frown.
116. List things that puzzle you.
117. It takes a thousand _____ to make one _____.
118. What will not happen tomorrow?
119. What always happens tomorrow?
120. Name three things that fit inside a six-inch cube.
121. What would you like to learn that is not taught in school?
122. In what ways could you recycle your desk?
123. Make a list of useless things.
124. Describe a telephone conversation between Abe and George.
125. List things that should avoid snow.
126. Spending time with a good friend is like
127. What advice could President Washington give to our current president?
128. Homework is ...
129. The answer is three feet. What is the question?
130. List things that reflect friendship.
131. Ten _____ would make me very happy.
132. In what ways can time be saved.
133. Some of my favorite things are
134. List quiet numbers. (Loud)
135. Flying a kite is like
136. Make up a name for a new magazine that you would like to write for or publish.
137. Give an excellent but different April Fool's prank.
138. List things that are about four feet square. (round)
139. List things that you feel.
140. In what ways could you enjoy an April shower? (May flowers)
141. I would like to have a dozen _____.
142. List things that jump.
143. List things that count.
144. Make a wonderful wish.
145. What secret thing could you keep in a cup in a magic closet?
146. Describe the contents of a box of happiness.
147. In what ways would you like to change last week?
148. The answer is 220. What is the problem?
149. What would you do with one million bars of soap?
150. Name something blue. (Substitute other colors)
151. List things that feel soft. (Hard)
152. List things that glisten. (Are dull)
153. Mayday! Mayday! What could be happening?
154. Describe situations when out is in.
155. _____ makes me feel special.
156. If you blink, you might miss
157. What always happens tomorrow?

158. When is what where?
159. In what ways would you improve the view from your window?
160. Homework is
161. Describe the sounds of a sunset.
162. List names for space aliens.
163. List things that should avoid snow.
164. What would you like to learn that is not taught in school?
165. List something useless.
166. When is never soon enough?
167. My favorite day is
168. Name sounds that warm you.
169. Make a bumper sticker for Santa's sleigh.
170. What makes you run?
171. Describe Sam's new school.
172. Describe a Post Office in the Year 3000.
175. What's really funny?
176. Write a bumper sticker for your cap.
177. When is large little?
178. List things that march.
179. It is not OK to
180. Name thing that you (not) like to touch.
181. What's "Wow"?
182. List a business you might start based on jelly beans.
183. If you found a box full of time, how would you use it.
184. List things that don't work.
185. Name something round.
186. Think of a new name for your school.
187. What might be the title of a cowboy's song to his horse?
188. About 500 miles is the answer to what question?
189. You are stranded in an airport due to bad weather. List something you could do to pass the time.
190. List things that overlap.
191. List things that make you grin.
192. List things that puzzle you.
193. This is the season for ...
194. List things that need horns.
195. List things that should never be made smaller (larger).
196. List a feeling you have when you hear a bell.
197. What would you like to see, even if only for a second?
198. Design a bumper sticker that would describe you on the way to school.
199. If time could be saved, in what would you keep it?
200. List reasons for late homework.
201. List things and places most likely to be haunted.
202. Name things that you would deposit in a time bank.
203. List things that appear wet but are dry. (dry but are wet)
204. Hands are everywhere. Name as many different kinds of hands as you can.
205. List something that reflects friendship.
206. Ten _____ would make me very happy.
207. In what ways can time be saved?
208. List quiet numbers.
209. Flying a kite is like ...
210. List foolish things.

211. List things that are about four feet square.
212. List things that you feel.
213. I would like to have a dozen _____.
214. List something that jumps.
215. List something that is sticky.
216. I have learned that....
217. What would you like to have five of?
218. What is your best excuse?
219. What would you grow in an imaginary garden?
220. Who pollutes?
221. What pollutes?
222. Why Pollute?
223. What does sunlight (water, air, earth) make you think of?
224. The emotion joy looks like ...
225. The emotion anger looks like ...

Verbal Hands-On

Verbal Hands-On Spontaneous problems involve the team members using one or more objects when giving a response. Following are practice Verbal Hands-On Spontaneous problems. A list of materials needed is given before each problem. Usual timing for these problems is one minute to think and two or three minutes to respond. Coaches may add additional items to those suggested in the following problems. If you are scoring, give one point for a common answer and 5 to 7 points for a creative answer.

Create

12" piece of string 2 pencils 3 drinking straws 6 toothpicks Coffee filter
 Meat baster 6 paper clips 1 paper towel 2 marbles Paper cup Paper plate 12"
 square of aluminum foil 24" piece of yarn Ruler or yardstick Napkin (paper or
 cloth) 2 rubber bands Business-size envelope 6 Marshmallows Sheet of
 paper 3 cotton balls Plastic spoon Balloon Tennis ball Toothbrush Coin Plastic
 bag Hat Surgical mask Clothes pin Eraser

From the above list, or by adding other items of the coach's own choice, the coach will select the number of items requested in the following questions. The items will be placed before the first team member who will then respond (and demonstrate if the question requires such action). The items are then given to the next team member to respond. Continue around the team until time runs out. After time ends, discuss the team's answers to determine if more creative responses could have been given.

1. As a prize for a contest you have a choice of one of the three items before you. You choose _____ because you say you can do the most with it. Explain your choice.
2. The three items have come to life! Describe the personality of each of these now-living characters.
3. Show how each of the three items could be improved upon to make a better product.
4. Use the three items to produce something that could be of value in the future.
5. A jewel thief has stolen a world famous gem from a museum. He used the three items to help him. How?
6. Your items are three clues uncovered from a previously unknown civilization. Describe their way of life and how those objects may have been used.
7. Use the one item to produce a musical instrument. How will it work? What kind of sound will it make?
8. You are about to blast off to another planet. You may take only one of the three items with you. Which one will it be? Why?
9. Aha! Mrs. Pansy's potted petunias have disappeared from her window boxes. The three items are the only clues to their disappearance. Explain.
10. Use all three items to design a new product useful around the house.
11. All three items belong to a person engaged in an unusual occupation. Describe it.
12. You are trapped in a cave with only the three items. One (or all of them) will help you escape. How?
13. Use the three items to create a new game or toy. Name it.

Foiled

This problem has two parts. Allow 4 minutes for Part 1 and 3 minutes for Part 2. Give each team member a piece of aluminum foil about 15 inches long. Each team member will shape the foil into one or more things. The team member will place the item on a table and describe it. In Part 2, the team members will respond in order to make a statement about one of the solutions. The team will continue to respond about each of the solutions until time runs out.

Statue

This problem has two parts. Allow four minutes during Part 1 and three minutes for Part 2. Give each team member eight straws to construct a sculpture. When time for Part 1 ends, each team member is to describe their sculpture. In Part 2, each team member is to describe one of the other four sculptures. The team member may select which sculpture he/she wants to describe. The team member may describe the same sculpture each time his/her turn occurs, or select a different one. SWAB Give a team member two cotton swabs. Give uses or pretend they are something. Pass the swabs from one team member to another as they give their responses.

Noise

Using only your fingers, make a different noise and explain what the sound represents.

Hot Chocolate

Place a cup before a team member. The team member is to answer the following question and then pass the cup to the next team member. The question: "My cup of chocolate is too hot, I would cool it off by _____."

Uses

Plastic spoon Meat baster Broom Stick of gum Napkin Piece of masking tape Golf ball Paper plate Surgical mask Book bag Book Glass jar Paper sack Bar of soap Scissors Colored paper Envelope Toy Cookie Plastic fork Cup Pencil File folder Small box 2 paper clips Rubber band Watch 3 cotton balls Band-Aid Fly swatter Pancake turner Ruler or yardstick Piece of paper Apron Ballpoint pen Piece of string Small picture frame Whistle

Using any two of the above, have the team member describe (and demonstrate) uses for one or both of the items.

Like

Place several Lima Beans or other vegetables or fruits (photographs may be used in place of the actual fruit or vegetable) before a team member. After giving a response, the team member passes the item to the next member. The team member is to answer the question: I (do not) like (name of fruit or vegetable) because.... (Have the team give answers one time about liking the fruit or vegetable and later about disliking it.)

HANDS-ON

Hands-On Spontaneous problems require the team members to use various items to create a final solution. Following are several practice hands-On Spontaneous problems. A list of materials needed is given before each problem. A scoring system is also given. Where teamwork is scored, the non-performing team members can be the scorekeepers. Materials may be

substituted if necessary. Coaches may also modify the requirements to add additional elements to the problems.

BRIDGE

Materials: 2 plastic cups 6 plastic drinking straws 20 miniature marshmallows 20 toothpicks Four golf balls 6" masking tape Time: 5 minutes Problem: Build a bridge that will support weights Place the two plastic cups on a table 12 inches apart. Create a bridge, the ends of which are placed on the two plastic cups, that will support at least one or more golf balls. To test the bridge after time runs out, place one golf ball at a time on the bridge. Scoring: 1 golf ball 10 points 2 golf balls 25 points 3 golf balls 50 points 4 golf balls 100 points Creativity of bridge: 1 - 10 points Teamwork: 1 - 10 points

TOWER

Materials: 5 drinking straws 20 marshmallows 20 toothpicks 4 computer labels Time: 5 minutes Problem: Build a tall tower. Build a tower as tall as possible. The team may stop at any time to have the tower judged. Scoring: 2 points for each half-inch in height. Fractions of a half-inch are to be counted as the next tallest half-inch. 1 - 15 points for teamwork. 1 - 20 points for creativity.

CAR

Materials: Paper milk carton Large deflated balloon 20 pieces of spaghetti 20 miniature marshmallows 20 toothpicks 5 computer labels 4 large round cookies Time: 5 minutes Problem: Build a car. Build a car that will travel at least five feet. Scoring: 25 points if the car travels at least one foot. 2 points for each inch traveled past five feet. 1 - 25 points for creativity. 1 - 25 points for teamwork.

EGG

Materials: Uncooked egg Plastic sandwich bag 3-inch cardboard square 2 rubber bands 1-inch square modeling clay 2 computer labels Small dish sponge Business-size envelope 2 rubber bands Time: 4 minutes Problem: Protect an egg Design a protection system for the egg. When completed, put the protected egg into the plastic sandwich bag. Then roll the egg underhanded at least six feet across the floor against the wall. Scoring: 50 points if the egg is not damaged in any way. 25 points if the egg has a small

crack. 10 points if the egg is broken but the contents have not leaked out. No points if the egg is smashed, but score points for teamwork and creativity. 1-15 points on teamwork. 1-15 points on creativity.

AIRPLANE

Materials: 5 Sheets of paper 5 paper clips Crayons or Markers Scissors
Time: 3 minutes Problem: Fly an airplane Give each team member one piece of paper and one paper clip. Each team member is to make a paper airplane that will fly at least 15 feet and will make at least two complete spirals (plane rolls over 360 degrees twice) while flying that distance. Scoring: 20 points for each airplane that flies at least 15 feet. 5 points for each foot flown past 15 feet. 5 points if plane spirals more than two times. 20 points for the creativity of each airplane.

PARTY

Materials: Ice Cream - Coach's choice Bowls Spoons Toppings - Coach's choice Cookies - Coach's choice Drinks - Coach's choice Napkins Time: 2 minutes Problem: Have fun at your party Design an ice cream sundae that represents a holiday. Have fun eating the sundae creation. Scoring: 1-20 points for the creativity of each sundae. 1-50 points on how well the team works together cleaning up afterward.

ROLL-UNDER

Materials: 20 pieces of spaghetti 20 miniature marshmallows 4 computer labels 20 toothpicks 5 golf balls Tennis ball Plastic cup Time: 6 minutes Problem: Build a tower that will support weights Build a tower that will support one or more golf balls. The tower must be tall enough to allow the tennis ball to roll freely underneath while it supports the golf balls. Scoring: 25 points for completing the tower. 5 points for each golf ball supported. 1 - 25 points for the creativity of the tower. 1 - 25 points for teamwork.

BOAT

Materials: Sheet paper 8 1/2 x 11" 6 inches masking tape 4 golf balls 8 x 14 inch cake pan Water Time: 5 minutes Problem: Build a boat that will float Create a boat that will support the weight of the golf balls. Place the golf balls in the boat one at a time. Wait three seconds between placement of each ball. Scoring: 1 golf ball 25 points 2 golf balls 40 points 3 golf balls 60

points 4 golf balls 80 points 1 - 25 points for creativity of the boat 1 - 25 points for teamwork

STRUCTURE

Materials: 25 Toothpicks 25 miniature marshmallows Plastic cup 4 golf balls Ruler Time: 5 minutes Problem: Build a structure that will support golf balls Build a structure that will support the plastic cup. The structure must be 5 inches high at the bottom of the cup. Use the ruler to measure the height of the structure only, it cannot be used as part of the solution. After the measurement, place the golf balls into the cup one at a time. Wait three seconds after placing a ball before putting the next one into the cup. Scoring: 25 points if the structure is at least 5 inches high 5 points for each additional half inch in height 15 points for each golf ball supported by the structure 1 - 25 points for the creativity of the structure 1 - 25 points for teamwork