Problem No. 1:
Ooh-Motional Vehicle
Introduction

Some people are known to “wear their heart on their sleeve.” Everything they feel is expressed openly. You know just where they stand on certain matters without them having to say a word. When something happens, either good or bad, they have a reaction that says they’re happy, sad, angry, impatient, or whatever the case may be. You see it in their expression and in their body language. This type of open expression is a good thing, because unexpressed feelings lead to misunderstandings and are not healthy. Let’s see what happens when Odyssey of the Mind teams have the chance to make a vehicle show human emotions.

A. The Problem

The team’s problem is to design, build, and operate a vehicle that travels a course and changes to display different human emotions. The vehicle will use two different propulsion systems or two different sources of energy for propulsion. One or more team members will ride on the vehicle as it travels a course, where it will make three stops. At each stop, the vehicle will encounter an “ooh-motional” situation that causes it to change emotion. At one stop the team will include a special effect that helps display the emotion and at a different stop the “ooh-motional” situation will cause the vehicle to travel in reverse. The team’s solution will be presented in a performance with a team-created theme that incorporates the vehicle traveling to stops and the different emotions.

The creative emphases of the problem are on the theme of the performance, the propulsion systems or application of different sources of energy, the way the vehicle changes to display emotions, the reasons for the emotions, and the special effect.

The Spirit of the Problem is for the team to design, build, and drive a vehicle that uses two different types of propulsion systems to travel and also changes to show emotion. The vehicle will start out showing one emotion, then travel to three different stops where it encounters situations that cause it to show different emotions. The vehicle will travel in reverse, and the team will create a special effect to help show an emotion. The team will present a theme for the presentation that includes the vehicle traveling and changing emotion.

B. Limitations

1. General Rules: Read the 2011-2012 Odyssey of the Mind Program Guide. This manual is updated each year and includes basic limitations for solving Odyssey of the Mind problems and the forms required for competition. This problem cannot be solved without referring to the Program Rules section of the guide.

2. Problem Clarifications: The Odyssey of the Mind Program Guide explains the types of questions about the rules that will be clarified and the ways to submit those questions. General problem clarifications can be accessed at www.odysseyofthemind.com/clarifications/. Problem clarifications improperly submitted, or sent after February 15, 2012, will not be answered. CCI may find it necessary to issue clarifications after that date, so continue to check for them after February 15 and until your last competition.

3. The time limit for this problem is 8 minutes. Time starts when the Timekeeper says, “Team begin,” and includes setup, Style, and the presentation of the problem solution.

4. The cost limit for this problem is $145 (U.S.). The combined value of the materials used during the demonstration of the team’s solution, including Style, cannot exceed this amount. The Odyssey of the Mind Program Guide explains the cost limit and lists items that are exempt from cost.

5. The team will create an original performance that includes:
   a. a ride-on vehicle that operates using two different propulsion systems or two different sources of energy for propulsion, shows four different emotions, and travels in reverse.
b. traveling a course with three stops, where the vehicle encounters “ooh-motional” situations that cause it to change emotions.

c. a theme for the presentation that incorporates the vehicle traveling to stops and the changing of emotion.

6. The vehicle that changes emotions:
   a. must be an original creation of the team; however, it may include commercially produced parts. There may be more than one vehicle, but only one is allowed to receive score for all required scoring categories.
   b. must fit completely within a 4’ x 6’ Start Area when time begins. It may expand to a larger size after time begins and it has left the Start Area.
   c. must be operated by one or more team members riding on it. Team members may get on and off the vehicle at any time that it is not traveling.
   d. must have either (1) two propulsion systems or (2) one propulsion system that uses two different types of energy to propel it. Additional energy sources or systems may be used to produce the changes in emotions.
   e. must have the propulsion system(s) and energy source be part of and travel with it, with the exception of direct human power pushing or pulling the vehicle.
   f. must be safe and not cause harm or damage to the competition site, the judges, the team, or anyone in the audience.

7. When showing emotion:
   a. the vehicle will display a total of four emotions: it will start out showing one emotion when it leaves the Start Area and it will change to express a different emotion at each of the three stops. The vehicle cannot begin to change emotions until after it leaves the Start Area.
   b. each emotion must be an outward visual expression.
   c. one display of emotion must be accompanied by a team-created special effect that is observable to the judges and audience.
   d. the change of emotion may be gradual or immediate and is allowed to begin while the vehicle is traveling. The vehicle must travel to its stop and may not leave for the next stop until the change is completed.
   e. the four emotions expressed by the vehicle must be from the following list:
      (1) fear
      (2) love
      (3) happiness
      (4) anger
      (5) sorrow
      (6) loathing
      (7) guilt
      (8) pride
      (9) embarrassment
      (10) surprise
      (11) contentment
      (12) envy
      (13) affection

8. When traveling:
   a. The vehicle will leave the Start Area at any time after time begins. It will then travel and cross Line A (see Figure A) and stop until it has completed its change of emotion. It will then travel across Line B and stop until it has changed emotion a second time. It will then travel across Line A and change emotion a third time. Crossing a line is completed when any part of the vehicle is over the line.

---

Figure A
b. The vehicle must travel in reverse on any one of the required trips. Traveling in reverse must be portrayed as part of the reaction of the encounter that causes the vehicle to change emotion.

c. The vehicle can change propulsion systems or energy sources any time that it is not traveling.

d. Even though the change of emotion may take place while the vehicle is traveling, at least part of the vehicle must be over the taped Line and the vehicle must be at rest for that change of emotion to be eligible for score.

9. The three stops:
   a. can occur at any time after the vehicle breaks the plane of the taped Lines (see Figure A).
   b. will be the area where the vehicle comes to rest to encounter a situation that causes it to change emotion.
   c. may be anything the team wishes.
   d. will include one where a team-created special effect helps display an emotion.
   e. will include one where the encounter causes the vehicle to travel in reverse across the line opposite to that stop.

10. The special effect:
   a. is allowed to be anything that helps convey the emotion.

11. The theme of the performance can be anything as long as it incorporates the vehicle traveling to the stops and the changes of emotion.

12. The team should present the Staging Area Judge with four copies of the Team's Required List Form found in the forms section of the Members Area at www.odysseyofthemind.com/members/ or four copies of a list on one side of one or two sheets of 81/2" x 11" or A4 paper. This list must be hand-printed, typed, or computer generated. It is for reference only. The list must include:
   a. the team’s membership name and number, the problem and division.
   b. the four emotions that the vehicle will express.
   c. a description of the three situations that cause the vehicle to change emotion.
   d. the two types of propulsion/energy sources and when in the performance each one will be used.
   e. a brief description of the special effect in B10.
   f. the signal the team will use to indicate it has finished presenting its solution.

C. Site, Setup and Competition

1. The competition area will be a minimum of 24' x 20' (7.3m x 6.1m) with a taped 4' x 6' Start Area and two taped Lines (see Figure A).

2. A three-prong electrical outlet will be available. Teams should bring their own extension cords and adapters, if needed.

3. Team members must report to the competition site with all of their props at least 15 minutes before they are scheduled to compete.

4. The Staging Area Judge will direct the team to move its vehicle into the 4' x 6' Start Area. If it does not fit completely within this area, or is not resting on the same floor contact points, and time allows, the judge will give the team time to fix the problem. Once the vehicle qualifies, or if no time to fix the problem remains, the team will be directed to leave the vehicle in place and return to the Staging Area until competition time begins.

5. At the end of the 8-minute competition period, the Timekeeper will call time and all activity must stop. The team may end before the 8 minutes, but it must signal the judges when it is finished.

6. Teams should bring cleaning utensils to clean up any mess. Should a team take an unreasonable amount of time to clean the site, or leave a mess, the judges will assess an Unsportsmanlike Conduct penalty. Others not on the team’s roster can help the team clear the site and remove the team’s props. The competition area must be left undamaged, and clean and dry for the next team.
D. Scoring

1. Creativity of the performance ................................................................. 1 to 20 points
2. Overall quality of the presentation ....................................................... 1 to 20 points
3. The vehicle’s propulsion system(s) ......................................................... 5 to 40 points
   a. Uses two systems or one system using two types of energy ................. 0 or 15 points
   b. Creativity (design, functional engineering, risk-taking) ...................... 5 to 25 points
4. Vehicle shows an emotion when leaving the Start Area .......................... 0 or 5 points
5. Vehicle travels in reverse ........................................................................ 0 or 10 points
6. The Stops .................................................................................................. 9 to 75 points
   a. Stop 1 ................................................................................................... 3 to 25 points
      (1) Originality of the situation that causes the vehicle to change emotion ... 1 to 5 points
      (2) Creativity of the engineering for the “ooh-motional” change ............ 1 to 15 points
      (3) Visual effect of the new “ooh-motion” .................................................. 1 to 5 points
   b. Stop 2 ................................................................................................... 3 to 25 points
      (1) Originality of the situation that causes the vehicle to change emotion ... 1 to 5 points
      (2) Creativity of the engineering for the “ooh-motional” change ............ 1 to 15 points
      (3) Visual effect of the new “ooh-motion” .................................................. 1 to 5 points
   c. Stop 3 ................................................................................................... 3 to 25 points
      (1) Originality of the situation that causes the vehicle to change emotion ... 1 to 5 points
      (2) Creativity of the engineering for the “ooh-motional” change ............ 1 to 15 points
      (3) Visual effect of the new “ooh-motion” .................................................. 1 to 5 points
7. The special effect ..................................................................................... 3 to 20 points
   a. Creativity ............................................................................................. 1 to 10 points
   b. Effectiveness in conveying the emotion ................................................ 1 to 5 points
   c. Unexpectedness .................................................................................... 1 to 5 points
8. How well the theme is conveyed throughout the performance ................... 1 to 10 points
   Maximum possible: 200 points

E. Penalties (Deducted from percentaged scores.)

1. “Spirit of the Problem” violation (each offense) ........................................ -1 to -100 points
2. Unsportsmanlike conduct (each offense) .................................................. -1 to -100 points
3. Incorrect or missing membership sign ..................................................... -1 to -15 points
4. Outside assistance (each offense) ............................................................. -1 to -100 points
5. Over cost limit .......................................................................................... -1 to -100 points
6. Vehicle does not fit within the 4’ x 6’ Start Area ........................................ -5 to -30 points
7. Emotion is not from the list in B7e ............................................................ -5 to -30 points
8. Vehicle is not at Stop 1, 2, or 3 when the encounter that causes the vehicle to change emotion takes place or nothing occurs to cause the emotional change ........................................................................... zero score for originality of the situation for that stop

Omission of scored problem requirements carries no penalty except loss of score.
F. **Style** (Elaboration of the problem solution; use four copies of the Style Form from the *Odyssey of the Mind Program Guide*.)

1. Artistic quality of a decoration on the vehicle ................................................................. 1 to 10 points
2. Creative use of a *prop* at one of the Stops ................................................................. 1 to 10 points
3. (Free choice of team) ...................................................................................................... 1 to 10 points
4. (Free choice of team) ...................................................................................................... 1 to 10 points
5. Overall effect of the four Style elements in the performance ............................................. 1 to 10 points

*Maximum possible: 50 points*

G. **Tournament Director Will Provide**

1. A 24’ x 20’ (7.3m x 6.1m) course (larger, if possible) with a 4’ x 6’ taped Start Area and two Lines.
2. A three-prong electrical outlet.
3. A judging team and materials necessary to judge this problem.

*NOTE: Contact your Tournament Director for site specifications, such as actual dimensions, floor surface, etc. Do not submit a clarification request for this information.*

H. **The Team Must Provide**

1. Four copies of its Style Form, one Cost Form, one Outside Assistance Form, and all team-specific clarifications.
2. Four copies of the list described in B12. This list is to assist the judges. If the team fails to provide the list, there will be no penalty; however, it benefits the team to have the list because without it, the judges could miss a scored aspect of the performance.
3. Any necessary extension cords or outlet adapters.
4. Cleanup materials as needed.

I. **Problem Glossary** (Italicized terms that are not in this Glossary can be found in the *20011-2012 Odyssey of the Mind Program Guide*.)

*Emotion* — a feeling that comes from within.

*Observable* — Noticeable, able to be detected.

*Outward visual expression* — an outwardly visual reaction to a lasting feeling that comes from within. For example, fear upon seeing a ghost, or embarrassment after giving the wrong answer in a classroom. Laughter that is a result of being told a joke or being tickled is not considered an emotion, because it is a temporary reaction to an outward source and does not indicate the state of true joy or happiness. It must be able to be viewed by the judges and audience.

*Propulsion system* — the method and application of energy used to propel the vehicle as it travels. This may be anything as long as it is allowed in the *Odyssey of the Mind Program Guide*. Types of energy sources used for propulsion can be mechanical power, batteries, direct or indirect human power, air movement, etc.

*Creative Competitions, Inc., its licensees, and the problem authors assume no responsibility for damage or injury incurred as a result of attempting to solve this problem.*

*Problem by Dr. C. Samuel Micklus and Samuel W. Micklus*

© 2011 — Creative Competitions, Inc.

© *Odyssey of the Mind, OotM, and the Odyssey of the Mind logo are federally registered trademarks of Creative Competitions, Inc.*