

# Odyssey reOMvention

Problem No. 2: Divisions I, II, III & IV

*Open to Virtual Teams*

**Sponsored by ARM & HAMMER™**

## Introduction

In 1996 Odyssey of the Mind teams created our first Odyssey Invention solutions. They designed a new product or redesigned an existing one to assist someone with a physical disability to help perform a task. There were wonderful solutions. This year Arm & Hammer wants all of our OMers to use their creativity to explore environmental threats and solutions. So, OM is reinventing this problem knowing that we are all stewards of the environment and that the key to preserving it is creative problem-solving!

## A. The Problem

While no one knows what the future holds, it's likely OMers will have an important role in shaping it! To prove just that, teams will present a performance that includes an original threat to the environment that self-replicates until a team-created technical reOMvention device removes the threat. A hero character will use the device to save the environment. Performances will include a setting that reflects the threat and then returns to its original state. The performance will also include original music, two animal characters, and must include ARM & HAMMER™ Baking Soda.

The **creative emphases** of the problem are on the overall performance, how the threat self-replicates, the reOMvention device, the original music and how ARM & HAMMER™ Baking Soda is used in the solution.

The **Spirit of the Problem** is for the team to create a performance about a self-replicating threat to an environment found on Earth. It is eliminated by a team-created Odyssey reOMvention device that is used by a Hero Character to save the environment. The environment returns to its original state after the threat is removed, which will be reflected in a setting change. Two animal characters will hide when the environment is threatened, and then one animal will convince the other that it is safe to return once the threat is removed. The performance will also include an original song and must use ARM & HAMMER™ Baking soda.

## B. Limitations *(Italicized word/terms are defined in the Problem Glossary or in the 2021-22 Odyssey of the Mind Program Guide.)*

1. **General Rules:** Read the *2021-22 Odyssey of the Mind Program Guide*. This manual is updated each year and includes important rules for solving Odyssey of the Mind Problems and 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 that will be clarified and how to submit them. Problem clarifications can be submitted and accessed at [www.odysseyofthemind.com/clarifications](http://www.odysseyofthemind.com/clarifications). The deadline for submission is February 15, 2022. CCI may find it necessary to issue clarifications after that date, so continue to check for them after February 15 and before each competition.
3. The **time limit** for this problem is 8 minutes. This includes setup, Style, and the presentation of the solution. Time will start when the Timekeeper says, "Team begin," and will end when the team gives its signal that it is finished or the timekeeper calls "Time."
4. The **cost limit** for this problem is \$145 (U.S.). The combined value of all materials used during the presentation of the solution, including Style, cannot exceed this amount. The Odyssey of the Mind Program Guide explains the cost limit and how to determine the value of the materials used.
5. The team will create an original performance that includes:
  - a. an original threat to the environment that self-replicates.
  - b. a team-created technical reOMvention device.
  - c. a hero character that uses the reOMvention device.
  - d. a setting that reflects the growing threat and its return to its original state.
  - e. original music.
  - f. two animal characters.
  - g. the use of ARM & HAMMER™ Baking Soda.
  - h. five Style elements including two that are chosen by the team listed in F. Style.
6. The original threat:
  - a. must be portrayed as affecting an existing physical environment found on, in, or surrounding planet Earth. Note: thoughts, feelings, dreams, etc. are not considered a physical environment.
  - b. can be anything the team wishes *as portrayed in the performance*.
  - c. must be represented by something tangible in the performance.
  - d. will self-replicate; that is, it will increase in number through addition of more of the same threat. This can be done in any way, but the replication must be represented by something physical in the performance that can be seen by the judges and audience. As it replicates it will change the setting.
7. The reOMvention device:
  - a. must be an original device designed and constructed by the team. It may include commercially-produced parts.
  - b. cannot be powered by any form of electricity, including battery power.
    - o Division 1 is allowed to use *direct human power, indirect human power*, and mechanical (except for electricity).

- o Divisions 2/3/4 must be self-contained and cannot use direct human power, but indirect human power and mechanical power (except for electricity) are allowed.
  - c. will physically remove the threat, causing the environment to return to its original state.
8. The Hero Character:
- a. will save the environment by using the reOMvention device as portrayed in the performance.
  - b. must be a team member in costume.
9. The setting:
- a. must portray all or part of the physical environment of Earth being affected by the threat. It may be presented any way the team wishes, but must be tangible and visible to the judges and audience.
  - b. will be shown in its original state and then change when affected by the threat. The change must be visible to judges and audience. Adding and removing items to the set can qualify as a change of the set.
  - c. will return to its original state after the reOMvention device removes the threat.
10. Original music:
- a. must be performed live as described under Program Rules in the Odyssey of the Mind Program Guide.
  - b. does not have to include lyrics but can if the team wishes.
  - c. must be team-created. This can be an original composition, or an existing arrangement performed in an original way.
11. The two required animal characters:
- a. may be portrayed any way the team wishes but they must meet the requirements of being a *character*.
  - b. must be currently existing animals.
  - c. will hide while the environment is threatened. Hiding in the performance can be shown in any way. Once the threat is removed by the reOMvention device, one animal will convince the other that it is safe to return.
12. The use of ARM & HAMMER™ Baking Soda:
- a. must be visible to the judges and audience.
  - b. must be contained and not cause damage to the competition site.
  - c. can be used in any way the team wishes.
13. The team should present the Staging Area Judge with four copies of the Team List Form found in the forms section at [www.odysseyofthemind.com/members](http://www.odysseyofthemind.com/members) or four copies of a list on one side of one or two sheets of 8 ½" x 11" or A4 paper. This list can be hand-printed, typed, or computer generated. It is for reference only. This list must include:
- a. the team's membership name and number, the problem and division.
  - b. a brief description of the threat and how it self-replicates.
  - c. a brief description of the reOMvention device, how it operates, the power source used, and how it removes the threat.
  - d. a brief description of the Hero Character and how it uses the device.

- e. a brief description of the setting and how the environment changes during and after the threat.
- f. when in the performance the original music will be performed.
- g. a brief description of the required animal characters being scored.
- h. how ARM & HAMMER™ Baking Soda is used.
- i. the signal the team will use to indicate it has finished its performance.

### C. Site, Setup and Competition

1. A stage or floor area a minimum of 10' x 10' (3m x 3m) will be used, but a larger area is desirable. This will not be marked. Teams must be prepared to perform in a 10' x 10' area. If space permits, the team may perform and/or place equipment, props, etc. outside the 10' x 10' area. If a drop-off exists beyond the 10' x 10' dimensions, a caution line may be taped 30" (76.2cm) from the edge of the drop-off. This will serve as a warning, not a boundary.
2. A three-prong electrical outlet will be available at the performance area. Teams must bring their own extension cords and adapters, if needed.
3. The team members should report to the competition site with all items for the presentation of their solution at least 15 minutes before they are scheduled to compete.
4. At the end of the 8-minute time period, the Timekeeper will call "Time" and all activity must stop. The team may end before the 8 minutes but must signal the judges when it is finished.
5. 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 clean and dry for the next competing team.

### D. Scoring

1. Creativity of the overall performance (originality, effectiveness).....1 to 15 points
2. Overall quality of the presentation .....1 to 15 points
3. The threat to the environment.....6 to 30 points
  - a. Originality.....3 to 15 points
  - b. Creativity in how it self-replicates.....3 to 15 points
4. The reOMvention device.....7 to 35 points
  - a. Creativity of engineering .....5 to 20 points
  - b. Risk-taking in design.....2 to 10 points
  - c. Removes the threat .....0 or 5 points
5. The Hero Character .....2 to 15 points
  - a. Uses the reOMvention device to save the environment.....0 or 5 points
  - b. Impact on the performance .....2 to 10 points
6. The Setting.....2 to 20 points

- a. Changes as the threat grows .....0 or 5 points
- b. Returns to normal after threat is removed by reOMvention device....0 or 5 points
- c. Creativity of the functional design of how the setting changes.....2 to 10 points
- 7. The original music.....4 to 20 points
  - a. Creativity of how it is produced .....2 to 10 points
  - b. Effectiveness in the performance.....2 to 10 points
- 8. The animal characters .....4 to 30 points
  - a. Represent existing animals .....0 or 5 points
  - b. Creativity of their portrayal .....3 to 15 points
  - c. Both hide in response to the threat.....0 or 5 points
  - d. Creativity of how one animal convinces the other to return to the environment .....1 to 5 points
- 9. The use of ARM & HAMMER™ Baking Soda.....4 to 20 points
  - a. Creative use of Baking Soda .....2 to 10 points
  - b. Impact on the performance .....2 to 10 points

*Maximum possible: 200 points*

**E. Penalties**

- 1. “Spirit of the Problem” violation (each offense) .....-1 to -30 points
- 2. Unsportsmanlike conduct (each offense) .....-1 to -30 points
- 3. Missing membership sign or wrong team/problem/division .....-1 to -5 points
- 4. Outside assistance (each offense) .....-1 to -25 points
- 5. Over cost limit.....-1 to -30 points

*Teams that don't present a scored element of the problem will not receive a penalty, they will receive a zero score for that category.*

**F. Style** (Elaboration of the problem solution; use four copies of the Style Form from the 2021-22 *Odyssey of the Mind Program Guide*.)

- 1. Creative design of a costume worn by a team member .....1 to 10 points
- 2. Creative use of paperclips .....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. 10' x 10' (3m x 3m) presentation area (larger, if possible).

2. A three-prong electrical outlet at the performance area.
3. A judging team and materials necessary to judge this problem.

**NOTE:** Contact your local 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 Team List as described in B13. 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 lists because without them the judges might miss a scored aspect of the performance.
3. Any necessary extension cords or outlet adapters.
4. Cleanup materials as needed.

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

© Copyright 2021— Creative Competitions, Inc.

**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.**

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