

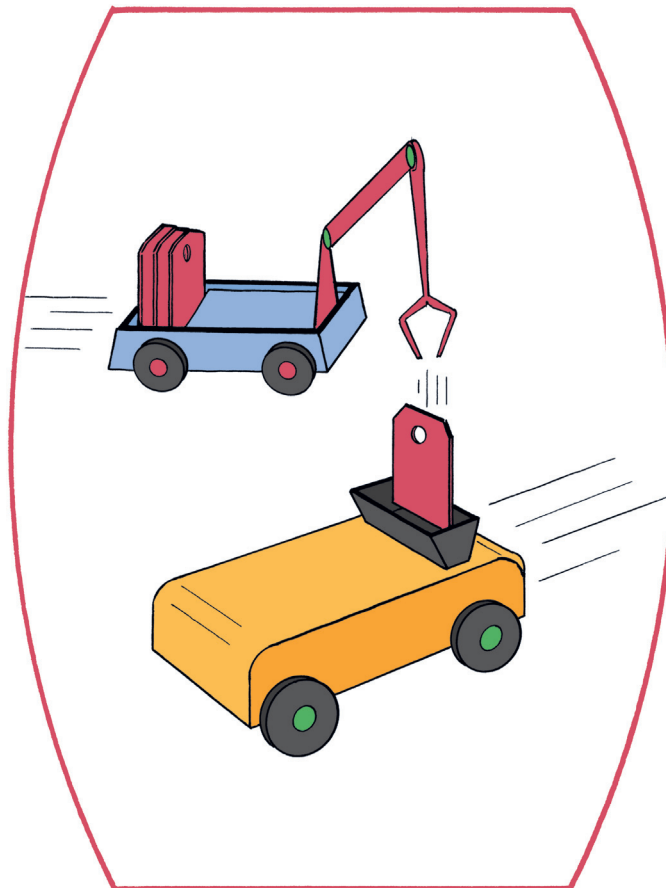


**ODYSSEY OF THE MIND®**

**2006-2007**

**Problem No. 1:**

**TAG 'EM**



# Tag 'Em

## Problem No. 1: Divisions I, II, III & IV

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### A. The Problem

The team's problem is to design and build one, two or three small vehicles and to run them on trips across a course while tagging them. The team will create its tags and a tagging system to remotely attach them to the vehicle, one per trip, while the vehicle is in the Tagging Zone. Each tag that is used will be placed in a team-created sorting system. The team will demonstrate its solution in a performance that incorporates the running of the vehicles and the sorting of the tagging results.

The **creative emphasis** is on the overall performance, the design of the vehicle, the tagging system, and the tag sorting system.

The **Spirit of the Problem** is for the team to design and build one, two or three vehicles, and to create tags, a tagging system, and a tag sorting system. The team will run its vehicle on trips across a course while using its tagging system to attach the tags, sort the used tags in its sorting system, and include these activities in the theme of its performance.

### B. Limitations (Italicized words/terms are defined on Page 5 in the Problem Glossary or in the **updated 2006-2007 Odyssey of the Mind Program Guide**.)

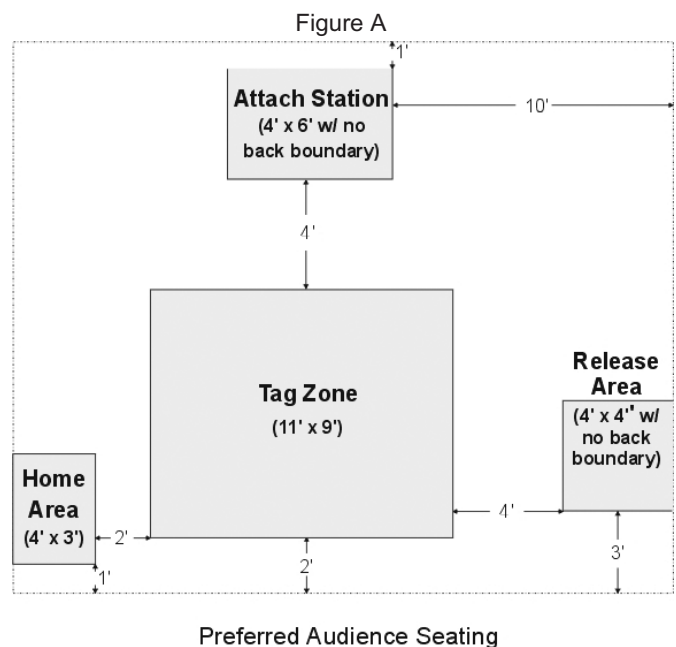
1. **General Rules:** Read the *2006-2007 Odyssey of the Mind Program Guide*. This manual includes basic limitations for this problem and the forms required for competition. This problem cannot be solved without referring to the Program Rules section of the guide.
2. **Problem Clarifications:** The *Odyssey 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/](http://www.odysseyofthemind.com/clarifications/) and are published in the fall and winter issues of the *Odyssey of the Mind Newsletter*. Problem clarifications improperly submitted, postmarked, or emailed after February 15, 2007, 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 before each competition.
3. The time limit for this problem is 8 minutes. This starts when the Timekeeper says, "Begin" and includes setup, Style, and 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 must:
  - a. design, build and run one, two or three vehicles on trips for score. In limitations for this problem, the word "vehicle" refers to the 1, 2 or 3 vehicles that take trips for score. All vehicles that take trips must individually meet the limitations and will be averaged for score as a group for D2.
  - b. make tags to *attach to the vehicle(s)*.
  - c. design, build and use a system to attach the tags to the vehicle.
  - d. design, build and use a system to sort the tags.
  - e. include the running and tagging of the vehicle as well as the tag sorting system in the theme of its performance.
6. The vehicle taking trips:
  - a. is allowed to be propelled in any way within the general rules in the *2006-2007 Odyssey of the Mind Program Guide*.
  - b. must be designed to be safe and to not damage or leave marks on the floor (*See the Odyssey of the Mind Program Guide*.) Judges may request that the team demonstrate the way the vehicle will travel to ensure it will not damage/harm the floor or cause harm to anyone. The team is responsible for all damage and injuries caused as a result of solving this problem.

- c. is not allowed to be preprogrammed using *computerized means* in any way that helps it travel across the course or assist in the tagging process.
  - d. must not be commercially produced. This prohibits buying a vehicle, assembling a vehicle from a kit, using only parts of a different vehicle as intended by the manufacturer, etc. The vehicle may include *commercially produced parts* as long as the parts required to make the vehicle function to travel across the floor and get tagged (chassis, propulsion, steering, carry tag, etc.) are not all used as a whole (or system) for their original, intended purpose.
  - e. must be able to fit (one at a time) completely inside a closed box that has inside dimensions that measure 12" x 16" x 16" (.3m x .41m x .41m). The vehicle may be any shape as long as it does not exceed this size limitation at any time during the performance.
  - f. may be repaired at any time. Parts may be added, removed and/or replaced as the team wishes.
7. The Tags:
- a. must be made by the team and may be made of any material(s).
  - b. must each be able to fit inside a 12" (.3 m) cube at all times without being manipulated.
  - c. must not exceed a total of 20. The team may use less than 20 tags but each tag may only be used on one trip.
  - d. must be tangible, touchable, and visible. They must not be any form of light, laser, sound, etc. Only the tags used on trips during the performance will be considered when scoring D4b.
8. While running the vehicle on trips:
- a. the vehicle, team members, and materials used to propel and/or guide the vehicle must not be beyond the Release Area when the vehicle is released. Team members must not help propel or guide the vehicle on a trip after it moves completely out of the Release Area.
  - b. once the vehicle moves entirely out of the Release Area it is not allowed to touch anything except the floor of the competition area, a tag, or components used to attach the tag.
  - c. team members can stop a trip at any time. If the vehicle stops or is stopped by the team before it reaches the Tag Zone it will not count as a trip and no tag is used. However, once any part of the vehicle breaks any part of the plane of the Tag Zone the trip will count and a tag will be considered used for that trip and must be put into the sorting system.
  - d. a trip ends if the vehicle leaves the Release Area and any one of the following occurs:
    - (1) it touches anything other than the floor, a tag, or tagging system components or anything external to it.
    - (2) it is guided or propelled by the tagging system components or anything external to it.
    - (3) it breaks the plane of the Home Area.
    - (4) a different vehicle is released on a trip. If a vehicle is released while another one is still on a trip, the trip for the one released first will be considered stopped at that time. The vehicle most recently released can continue.
    - (5) the 8-minute competition time ends.
9. Tagging the vehicle:
- a. only one tag may be used on a trip. Teams may not attempt to attach a different tag on the same trip or the same tag on more than one trip, but they may make repeated attempts to attach the same tag on the same trip. See also B8d.
  - b. at least some part of the vehicle must be *within the Tag Zone* when the tag is attached to it.
  - c. the tagging system must include and/or be operated by at least one team member working from inside the Attach Station. Team members who are helping attach tags must not touch the floor outside of the Attach Station. After the tag is attached they may move around as they wish.
  - d. components of the Tagging System are not allowed to touch the floor inside the Tag Zone before the vehicle is released.
  - e. one tag must be used for each trip whether or not it is successfully attached. When the trip ends the tag must be processed in the tag sorting system in any way the team wishes.

- f. the components of the tagging system must not be used to propel and/or guide the vehicle. Incidental guidance will not be penalized.
  - g. teams may use different components, systems, etc., to attach the tags and they may repair them at any time. However, all tagging systems and their components will be averaged when scoring D4a.
  - h. the 10 highest scores will count for score in D3.
10. The tag sorting system:
- a. must be created by the team and may be anything the team wishes.
  - b. must be visible to the judges.
  - c. may be anywhere on the competition site except inside any of the four taped areas.
  - d. must sort the tags after each trip in the following categories:
    - (1) the vehicle is successfully tagged in the Tag Zone and travels into the Home Area.
    - (2) the vehicle is successfully tagged in the Tag Zone but does not travel into the Home Area.
    - (3) a tag is not successfully attached but the vehicle successfully travels into the Home Area.
    - (4) a tag is not successfully attached and the vehicle does not travel into the Home Area.
  - e. The team is responsible for placing each tag that is used in its appropriate part of the sorting system; however, the judges will keep track for purposes of scoring. There will be no penalty if the team tracks the tags incorrectly.
11. Judges will warn team members who are working inappropriately on multiple trips. The team will receive a maximum of 2 warnings for the same offense no matter how often it occurs. For example, if a team member who is helping operate a device to attach tags on the vehicle is standing in front of the Attach Station, they will be told they are outside of the area. The tag used on this attempt may not be used on any other attempt. If the team continues to work inappropriately after two warnings, there is no penalty other than receiving zero score for those tagging attempts.

### C. Site, Setup and Competition

1. The competition area will be a minimum of 24' x 20' (7.3m x 6.1m) and will not be taped. See Figure A. The Release Area and Attach Station have no taped back boundary line. Everything that is behind the front line and between the taped sidelines is considered in that area.
2. A three-prong electrical outlet will be available. Teams should bring their own extension cords and adapters, if needed.
3. The team members must report to the competition site with all of their props at least 15 minutes before they are scheduled to compete.
4. 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.
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 undamaged, clean and dry for the next competing team.
6. The Staging Area Judge will measure the vehicle and tags in the Staging Area.
7. The Staging Area Judge will inform the team members of the words the judges will use to warn them if they are working inappropriately (see B11).



## D. Scoring

1. The overall performance .....2 to 25 points
  - a. Creativity .....1 to 15 points
  - b. How running and tagging the vehicle relates to theme .....1 to 10 points
2. The vehicle(s) making the trips .....3 to 50 points
  - a. Creativity of the *design* .....1 to 25 points
  - b. Creativity of how the vehicle functions during trips .....1 to 10 points
  - c. Originality of the *propulsion system* .....1 to 15 points
3. Tagging the vehicle (10 highest scores will count):.....0, 2, 80 points
  - a. Vehicle is not tagged but enters the Home Area .....2 points each
  - b. Vehicle is tagged but does not enter the Home Area .....5 points each
  - c. Vehicle is tagged and then enters the Home Area .....8 points each
4. Tags and tagging .....2 to 30 points
  - a. Creativity of the tagging system .....1 to 20 points
  - b. *Artistic quality* of the tags used in the performance .....1 to 10 points
5. Team-created tag sorting system .....2 to 15 points
  - a. How well it enhances the performance .....1 to 5 points
  - b. Creativity of the system .....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. A vehicle that takes one or more trips but does not meet specifications .....-1 to - 40 points
7. Tag does not meet specifications .....does not qualify for being attached
8. Omission of scored problem requirements carries no penalty except loss of score.

## F. Style (Elaboration of the problem solution; use three copies of the Style Form from the *Odyssey of the Mind Program Guide*.)

1. Visual quality of one vehicle .....1 to 10 points
2. Creativity of the costume of one team member .....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 minimum 24' x 20' (7.3 m x 6.1 m) competition site with a taped course as shown. A larger site is preferable and may be provided, but individual course dimensions will not change. The floor surface is not carpeted.
2. A device to measure the tags in the Staging Area.
3. A box to measure the vehicle(s).
4. A three-prong electrical outlet.
5. A judging team and materials necessary to judge this problem.

**NOTE:** Contact your Tournament Director for information regarding site specifications, such as size of competition area, floor surface, registration procedures, etc. Do not submit a clarification request for this information.

## H. The Team Must Provide

1. Three copies of its Style Form, one Material Values Form, one Outside Assistance Form, and all team-specific clarifications.
2. Any necessary extension cords or adapters.
3. Cleanup materials as needed.
4. Any clarifications it has received.

## I. Problem Glossary

*Artistic quality* — The distinctive characteristics, style, and effectiveness of the appearance of the visual attributes.

*Attach to the vehicle* — connected to and/or supported by the vehicle and moves as the vehicle moves.

*Commercially produced parts* — components that are manufactured and offered for sale to the general public that are not created with the intent to solve any Odyssey of the Mind problem.

*Computerized means* — having all of the following components: (1) microchip processor used as designed, (2) electricity in any form, and (3) electronic processing of data.

*Design* — Components (materials) that make up the vehicle and their arrangement (assembly). These are not limited to those components that are required to make trips and get tagged.

*Propulsion system* — the application of energy used for propulsion and the physical components that convert that energy in a manner that causes the vehicle to travel.

*Within the Tag Zone* — any part of the vehicle is inside the imaginary vertical plane of the area measured from the outside edge of the tape.

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

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