



# Maryland/DC Odyssey of the Mind

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## Hands-On Spontaneous Problem: Color Sorting

- A. *When the team members enter the room, tell them, “This is a hands-on problem. All team members may compete. Those who choose not to participate must sit quietly in these seats (indicate seats) and watch or leave the room. They cannot participate in any way.”*
- B. **JUDGE READS TO TEAMS:** (Do not read material in parentheses.)
- (1) **This is a one-part problem. You will have 8 minutes to build, test, and score your solution.**
  - (2) There is a 1ft by 1ft starting box with different colored scoring objects inside it (*point to square*), a taped starting line that can not be crossed (*point to starting line*), and 5 baskets labeled with the 5 different colors (*point to baskets*).
  - (3) **Your problem is to use only the objects provided (*point to materials*) to develop a transport system to move the colored popsicle sticks into their corresponding baskets.**
  - (4) **You must tell the judges when you are ready to start scoring your solution.**
  - (5) **When being judged for score, your team must stay on the side with the 1ft by 1ft square. No body part may cross the starting line. If a body part crosses the line, whatever scoring item is being moved will be placed back inside the starting box.**
  - (6) You may not touch any of the scoring items at any time while being scored. If one is touched, the item will be placed back in the starting box. Only building objects and the provided set up may touch the scoring items while being scored.
  - (7) You may not destroy any objects labeled with a colored sticker.
  - (8) **Only those scoring items that are placed in the correctly colored basket will count for score.**
  - (9) **You will be done when time is up or when you have sorted all of the scoring items into their correct containers.**
  - (10) You will be scored as follows:
    - A. 4 points for each scoring object placed in the correct colored box
    - B. You will receive 1 to 15 points for the creativity of your transportation system.
    - C. You will receive 1 to 10 points for how well your team works together.

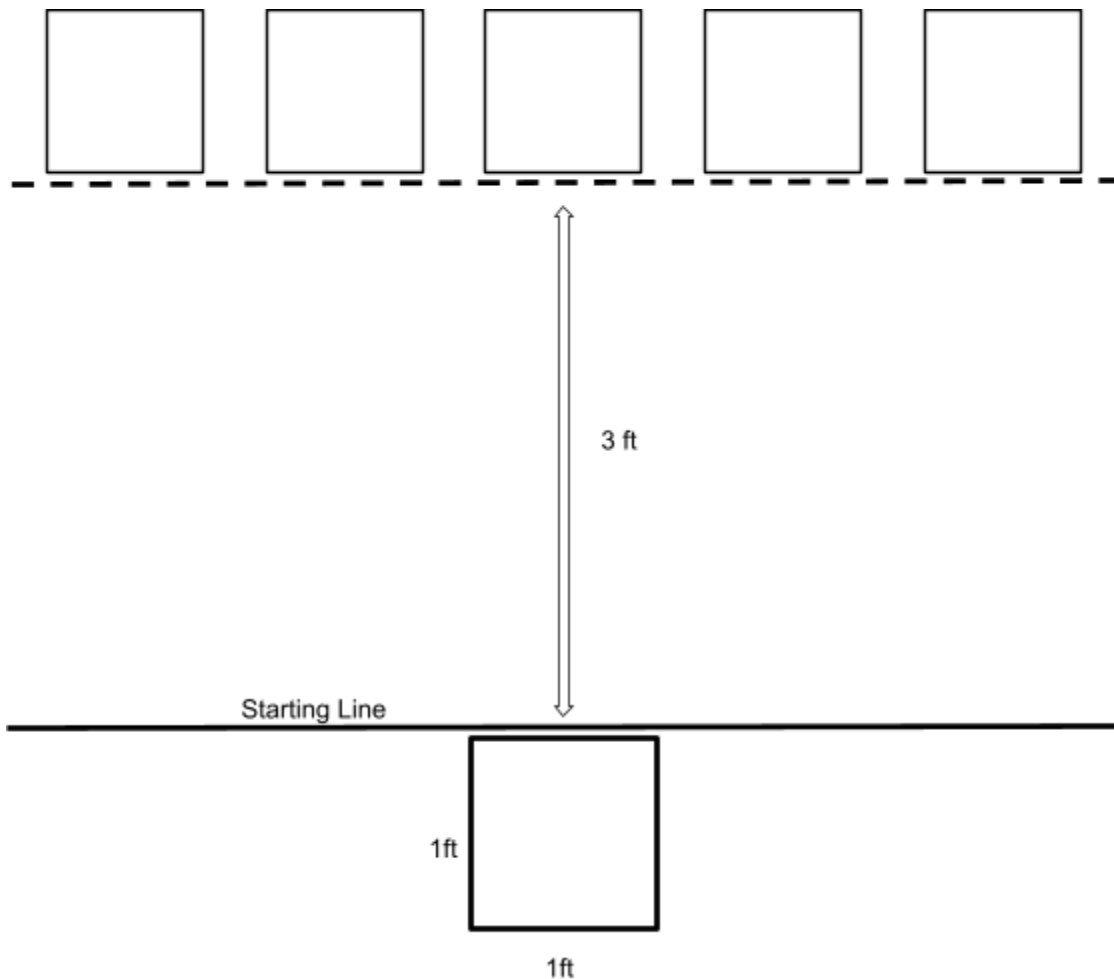
*(After reading the entire problem aloud, repeat the items in boldface. Begin by saying, “I repeat.” After reading boldface items, say “Begin Part I Practice time now. Then, for Part II say “Begin Part II Solution time now)*

**C. FOR JUDGES ONLY:**

1. Judges should discuss and practice solving the problem before the first team competes. Make any necessary decisions and or notes. All decisions must be applied uniformly to all teams.
  2. Practice reading the problem out loud before the first team competes. When reading to the team, illustrate the problem by pointing to items.
  3. Place two copies of the Team's Copy of the problem in full view of all team members before you read the problem to them. They may use them as a reference during the competition.
  4. Set up the competition area as shown in Figure A. Place scoring objects in the taped 1by1 square. Tape a starting line on the edge of the starting box. Place the 5 baskets exactly 3ft away from the starting line in a parallel line, evenly spaced apart.
  5. Before the team enters the room, place a set of the following materials on the middle line to be used to create their solution:
    - \*2 spatulas
    - \*2 wooden spoons
    - \*1 flip flop
    - 4 paper plates
    - 8 rubber bands
    - 3ft of masking tape
    - 3ft of string
    - \*4 unsharpened pencils
    - 10 paper clips
    - 4 plastic cups
- \*place a sticker on the ones that can not be destroyed
6. Have 50 scoring objects that are popsicle sticks or something similar. Have 10 of 5 different colors. Make sure the colors are distinct from one another. You can color the blank popsicle sticks with a sharpie or wrap them in a colored piece of duct tape if you do not have multicolored ones. Get 5 containers or baskets that are colors that match the popsicle sticks or tape paper to the container that matches. Make sure it is clear which popsicle stick is supposed to go into which container.
  7. The team will need to let you know before they wish to start being scored. If a team member crosses the starting taped line or touches a scoring object, the scoring object must be placed back into the starting taped square. Treat the starting line like a force field that goes up to the ceiling that the team can not cross.
  8. Once the team is ready to start being scored make sure that the containers are back to being 3ft away from the starting line and evenly spaced apart. Once they officially start being scored, the team may move the containers closer to them as long as they do not cross back over the starting line.
  9. Within the starting area, team members may move however they want to with the scoring items as long as no body part touches the popsicle sticks. Only the building materials, the floor, the taped lines, and the baskets may touch the scoring objects.
  10. When the team wishes to be scored, make sure the baskets are at the edge of the 3ft taped line. There is nothing in the problem that says they can't move the baskets once they start scoring. The baskets just can not cross back over the centerline.

11. Be sure to give each team exactly 8 minutes to build and test their solution. Warn the team when 3 minutes and 1 minute remain. This problem is about managing time when a team does not have two distinct parts.
12. When scoring **creativity of the solution**, assess how the team uses the materials to build their transportation system, variety of ideas considered, etc. When scoring **how well the team works together**, consider the extent that all team members are involved in developing the solution: Did the team delegate duties? Share ideas? Did the team members value one another's input?
13. If it is obvious that the team does not understand the problem, you should provide information to clarify the problem's intent and its limitations. **Do not offer tips on how to solve the problem.**

**Figure A: Site Setup**



# Team Copy

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3. Your problem is to use only the objects provided to develop a transport system to move the colored popsicle sticks into their corresponding baskets.
4. You must tell the judges when you are ready to start scoring your solution.
5. When being judged for score, your team must stay on the side with the 1ft by 1ft square. No body part may cross the starting line. If a body part crosses the line, whatever scoring item is being moved will be placed back inside the starting box.
6. You may not touch any of the scoring items at any time while being scored. If one is touched, the item will be placed back in the starting box. Only building objects and the provided set up may touch the scoring items while being scored.
7. You may not destroy any objects labeled with a colored sticker.
8. Only those scoring items that are placed in the correctly colored basket will count for score.
9. You will be done when time is up or when you have sorted all of the scoring items into their correct containers.
10. You will be scored as follows:
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