

The Trash Game

(Note: The Trash Game originally appeared in the Spring 2008 issue of *The Navigator* in an article by Tom Loughlin, ADSO-PA, District 7, titled “Let the Games Begin.”)

The Trash Game is designed to educate participants on the time it takes materials to biodegrade in the environment, increasing environmental awareness. It can be used in conjunction with Public Affairs events and in a classroom setting. The game works well with individuals, or as part of a team contest.

The game board is easily constructed and requires minimal woodworking skills. A table saw makes the job easier but is not required. All the materials should be readily available at a building supply store.



Photo from the Rose City Beacon, Summer 2012, by Thom Brennan, FSO-PB 22-05, D9CR

How to Play the Trash Game

1. If working with a small group, divide the group into teams of 2–5 people.
2. Remove the movable platforms from the base board and rearrange them randomly.
3. Have the participants arrange the platforms with the trash pieces from left to right, in the order it takes the trash to degrade in the environment. The time spans range from “2 to 4 weeks” to “Unknown.”
4. After the participants have arranged all 10 pieces of trash, they check their answers by flipping up the trap doors.
5. Most correct answers wins.



Photo from The Navigator, Spring 2008, by Dick Bangs, FSO-PB 11-10, D7

Materials Needed

- A 2-foot x 3-foot piece of good quality ½-inch plywood. Cut the plywood into:
 - 1 base piece, 30½ inches x 13 inches
 - 10 trap doors, 2 inches x 2 inches each
 - 10 movable platforms, 8 inches x 2¾ inches
- 1 wood strip, ¼ inch x ¼ inch x 30 inches. You can also use a piece of trim molding for this piece.
- 10 wood drawer pulls, 1-inch diameter
- 10 wood screws, #10-1 flat head
- 10 hinges, 1-inch long
- 1 set of labels for the trap doors and platforms (on page 4).
- 1 set of labels for the base board (on page 5).
- Paint and primer for the game board, platforms, and trap doors. As a suggestion, paint the base gloss gray and the trap doors red, white, and blue. But, hey, it's your trash game!
- Clean Trash:
 - 1 plastic water or soft drink bottle
 - 1 infant disposable diaper
 - 1 paper towel
 - 1 newspaper page
 - 1 glass jar (baby food works best)
 - 1 plastic beverage holder (AKA a six-pack ring, or an 8-pack ring)
 - 1 Styrofoam cup
 - 1 tin (steel) can

- 1 aluminum can
- 1 plastic bag
- 1 bunch monofilament fishing line
- 1 “waxed” milk carton. A 1-pint container works best.

Construction

1. Paint the trap doors and the base piece. If your flotilla has a unit logo, a large decal of the logo looks nice on the base board. You can make one with decal paper and a printer. You will need to clear coat the decal to protect it if you do this.
2. Attach the trap doors to the long side of the base piece using the hinges. The leading edges should be flush with the edge of the base. Space them evenly; about 1 to 1 1/8 inches apart.
3. Attach the ¼-inch strip about ½ inch away from the hinges, making sure the trap doors can be fully opened. Use either exterior glue or small brads. Paint to match the base.
4. Attach the wooden drawer pulls ½ inch from the short edge of the movable wooden platforms using the flathead wood screws, recessing the screws by countersinking. The movable platform with attached drawer pull should then be painted the same color as the base after this assembly.
5. Attach the pieces of clean trash to the movable platforms. A hot-melt glue gun works well for this. Be sure to leave enough room for the Trash Labels.
 - a. The tin (steel) can and the Styrofoam cup go on the same platform.
 - b. The plastic bottle and disposable diaper go on the same platform.
6. Print the Trash Labels and attach them to the top forward part of the moveable platforms (next to the handles) using spray adhesive. It is recommended that the labels be laminated or clear-coated to protect them from wear, tear, and the weather.
7. Print the Time Labels and attach them to the top of the trap doors using spray adhesive. The timeline is from the least amount of decay time (2 to 4 weeks) on the left-most trap door, gradually increasing to “Unknown” on the right-most trap door. Again, it is recommended that the labels be laminated or clear-coated to protect them from wear, tear, and the weather.
8. Attach Answer labels to the baseboard, centering them under the trap doors using spray adhesive.
9. Let the games begin!

Platform Labels

NEWSPAPER

PAPER TOWEL

ALUMINUM CAN

**PLASTIC BEVERAGE
HOLDER**

**TIN (STEEL) CAN &
STYROFOAM CUP**

**PLASTIC BOTTLE &
DISPOSABLE DIAPER**

GLASS

PLASTIC BAG

WAXED CARTON

MONOFILAMENT LINE

Trap Door Labels (top)

2 TO 4 WEEKS

6 WEEKS

3 MONTHS

10 TO 20 YEARS

50 YEARS

200 YEARS

400 YEARS

450 YEARS

600 YEARS

UNKNOWN

PAPER TOWELS
2 TO 4 WEEKS

NEWSPAPERS
6 WEEKS

WAXED CARTON
3 MONTHS

PLASTIC BAGS
10 TO 20 YEARS

**TIN CAN &
STYROFOAM
CUP**
50 YEARS

ALUMINUM CANS
200 YEARS

**PLASTIC
BEVERAGE
HOLDER**
400 YEARS

**PLASTIC
BOTTLE &
DISPOSABLE
DIAPER**
450 YEARS

**MONOFILAMENT
FISHING LINE**
600 YEARS

GLASS
UNDETERMINED

Base Board Answer Labels (go under trap doors)