Players: 2 teams (2 or more players each) + 1 or more “judges”  
Ages: 8 – 11

Materials:
- 1 set of trash cards (included)
- sorting guide (included)
- score sheet (included)
- 8 containers – 4 per team (to throw trash cards in, eg cardboard boxes, plastic bins or recycling bins)
- labels or sheets of paper and tape
- markers/pens

Getting Ready:
1. Print out the score sheet and the sorting guide. Print out one set of the trash cards and cut out each of the cards.
2. Write each of the following words on a separate piece of paper or label: “Landfill,” “Reduce,” “Reuse,” and “Recycle.” Repeat so that each word is on two pieces of paper. You should have a total of 8 signs. Tape one sheet to each of the 8 containers. There should be two containers for each category. Tip: Have each team come up with a team name and add it to a set of signs for their containers.
3. Set aside an area (either indoors or outdoors) as your obstacle course site. Place the containers at the corners of the game area, keeping the two “landfill” containers together, the two “reduce” containers together, etc., so that each corner of the game area is a different category. The landfill bins should be the easiest to get to and the reuse bins should be the hardest (see “Game Setup” below for a diagram).
4. Shuffle the trash cards and place them face down in a pile in the center of the game area.
5. (Optional) Create fun challenges/obstacles for players to do on their way to each of the containers. For example, skip, walk while bouncing or dribbling a ball, or walk while balancing items on your head. (Brainstorm obstacles with your class.) The category with the most points (reuse) should have the hardest obstacle leading to it, and the category with the least points (landfill) should have the easiest obstacle. Vary the levels of difficulty of the obstacles placed between the pile and the bins, as follows:
   - “Landfill” bins = Easiest obstacle (or least time-consuming obstacle)
   - “Recycle” and “Compost” bins = Medium-difficulty (or time-consuming) obstacle
   - “Reuse” bins = Hardest obstacle (or most time-consuming obstacle)

You Need to Know...
Not all trash is trash! Some things that are commonly thrown away can actually be reused, recycled or composted.

Find more math games and activities at pbskids.org/cyberchase
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Playing the Game:

1. Divide players into two teams, leaving one or more people to be judges.

2. This part is like a relay race. Each team stands in a line, with one person in front of the other. When the judge says “go,” the first player from each team grabs a trash card from the pile, brainstorms with teammates about what category to place it in, and then races to put the card in the corresponding container. The first player races back to the pile. The second player from his/her team then picks up another card, brainstorms with teammates about what category to place it in, and races to put the card in his/her team’s corresponding container.

3. Each sorted object is assigned a point value, as follows:
   - **Reuse** objects = 15 points
   - **Compost** objects = 10 points
   - **Recycle** objects = 10 points
   - **Landfill** objects = 5 points

4. Teams continue racing each other to sort as many cards as possible into the containers for reuse, recycling, compost or landfill. After the teams have placed the final cards from the pile into the containers, the game is over. The team with the most points wins.

   *Tips: Teams must make strategic choices about where objects truly belong. The “landfill” bins will be the easiest to get to, but they’re worth the fewest points. The “reuse” bins will be the hardest to get to and worth the most points. All teams are pulling from the same pile, so they must act fast to get the most points!*

Scoring:

At the end of the game, the judges go through both teams’ containers and add up all the points. Judges can refer to the sorting guide, as needed, to help them score the game. Objects placed in the wrong container do not earn any points. The team with most points wins!

More Ways to Play:

Try these fun variations and see what happens!

- Use real objects instead of (or in addition to) the trash cards.
- Add objects to the game by making your own trash cards (blank cards are included on the last page).
- Have teams explain and defend why they placed an object in a particular category to the judge. For example, if someone put a broken broomstick in the reusable pile, s/he could explain how it could be reused. The judge(s) make the final decision about whether the category in which the teams have placed an object makes sense.
- Print out two copies of each of the trash cards and give each team its own set of cards to sort on its own, rather than having both teams sort from the same pile. How do their decisions differ?
**Game: Trash Dash**

*Continued*

**Game Setup:**

Here’s one way to organize the game area:

- **PILE** (Team A & Team B base)
  - Hardest obstacle
  - Medium-difficulty obstacle
  - Easiest obstacle

- **REUSE BINS**
  - Team A
  - Team B

- **RECYCLE BINS**
  - Team A
  - Team B

- **COMPOST BINS**
  - Team A
  - Team B

- **LANDFILL BINS**
  - Team A
  - Team B
Sorting Guide:

Here’s how we’ve categorized each object represented by a trash card:

<table>
<thead>
<tr>
<th>Reuse</th>
<th>Recycle</th>
<th>Compost</th>
<th>Landfill</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseball bat</td>
<td>Newspaper</td>
<td>Dead flowers</td>
<td>Broken brick</td>
</tr>
<tr>
<td>Ribbon</td>
<td>Empty can</td>
<td>Grapes</td>
<td>Broken clock</td>
</tr>
<tr>
<td>Clock</td>
<td>Ripped comic book</td>
<td>Cucumber slices</td>
<td>Worn-out shoes</td>
</tr>
<tr>
<td>Bird cage</td>
<td>Empty glass jar</td>
<td>Moldy donut</td>
<td>Broken broom</td>
</tr>
<tr>
<td>Ruler</td>
<td>Magazine</td>
<td>Leaves and twigs</td>
<td>Used disposable wipe</td>
</tr>
<tr>
<td>Gently-used toys</td>
<td>Cardboard box</td>
<td>Cookies</td>
<td>Cheese</td>
</tr>
<tr>
<td>Scuffed-up soccer ball</td>
<td>Paper party hats</td>
<td>Carrots</td>
<td>Broken pen</td>
</tr>
<tr>
<td>Wig</td>
<td>Empty milk carton</td>
<td>Apple cores</td>
<td>Half-eaten sandwich with cheese and meat</td>
</tr>
<tr>
<td>Bookshelf</td>
<td>Empty soda pop bottle</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Tip: Many items listed in the “recycle” category, as well as some items listed in the other categories above, could also be reused, either for their intended uses (for example, using a paper bag as a bag) or in new and creative ways, such as in arts and crafts projects (for example, using a paper bag to make a puppet). As long as players can convince the judge(s) of how the items can be reused, the players can place the items in the reuse category.

Other items to consider for your game:

- **Other reusable items**: blanket, books, book cover, carpet, CDs, containers, glasses, hangers, jeans, old jewelry, old phone, paper clips, planters, pots, rubber bands
- **Other recyclable items**: aluminum foil (not covered in food), cartons, cereal box, empty ice cream, egg cartons (paper and some Styrofoam), expired coupons, glass bottle, greeting cards, juice boxes, old phone book, paper towel tube, plastic milk jug, soup cans, used envelopes, used notebooks, ripped folder, pill bottles, popsicle stick
- **Other compostable items**: broccoli stalks, coffee grinds, cooked plain pasta, cooked plain rice, crackers, grass clippings, pine cones, pine needles, stale bread, tea bags, tomato, used coffee filters, weeds
- **Other landfill items**: aerosol cans, broken mirrors, foil (covered in food), broken umbrella, candy wrapper, chip bags, disposable cleaning cloths, disposable diapers, lipstick, meat/cheese scraps, plastic caps, plastic cutlery, plastic straws, plastic wrap, sticky notes, Styrofoam cups, toothbrushes, used stickers, used tape

Score Sheet:

Print copies of this score sheet (next page) to keep track of how the teams do. Or, follow this format and make large scorecards on the chalkboard.
Paper party hats

Ribbon

Baseball bat

Bookshelf
Clock

Bird cage

Ruler

Scuffed-up soccer ball
Trash Cards

Cyberchase Trash Dash

Newspaper

Empty soda pop bottle

Empty can

Ripped comic book
Trash Cards

Cyberchase Trash Dash

Empty glass jar

Magazine

Cyberchase Trash Dash

Cardboard box

Empty milk carton
Worn-out shoes

Broken pen

Used paper

Dead flowers
Half-eaten sandwich with cheese and meat

Grapes

Cucumber slices

Cheese
Moldy donut

Apple cores

Cookies

Leaves and twigs
Trash Cards

Broken broom

Wig

Broken clock

Used disposable wipe