

Earth Out Loud
Recycle This!
Activity: 20 minutes

Act it Out: Human Recycling Machine

The Recycle This! [video](#) on Earth Out Loud shows a single-stream recycling plant at work — it's pretty exciting. Dump trucks bring in loads of plastic, paper, glass and metal, which are sorted and recycled using conveyor belts, machines, vehicles and people.

In this fun activity, participants get to *act out* the recycling process (for all materials except glass). Use the simple script included here to narrate the play — or improvise!

Materials (per round of play or group of 9 kids):

- 2+ steel cans (e.g. for canned food), clean and with no rough edges
- 2+ aluminum cans (soda cans)
- 4+ assorted paper items (envelopes, newspaper, magazine, cardboard, etc.)
- 3+ small plastic containers, assorted #s (e.g. #1, #2, #4 plastic)
- 1 plastic grocery bag or other non-recyclable item
- 1 recycle bin or cloth grocery bag big enough to hold all items
- 1 towel
- 1 magnet (optional)
- 1 script (next page) and/or your imagination

Instructions:

Assign each child a role (listed below). Participants may take on multiple roles if you are a small group. After you've acted out one round of the recycling process, switch jobs and play again!

Characters, in order of appearance:

- Recycle Truck (collects material and dumps on floor)
- Conveyor Belt (2 kids: move material from one place to another)
- Screen Sorter (sorts cardboard/paper)
- Rotating Magnet (sorts food cans)
- Eddy Current (sorts aluminum cans)
- Optical Sorter (sorts plastic)
- Human sorter (pulls out non-recyclables)
- Baler (crushes material and ties it together)

Human Recycling Machine

To set up: Seat participants on the floor in a circle. Lay the towel in the center of the circle.

To begin: Give each child a few recyclable items to hold.

1. Early in the morning, the **recycle truck** picks up the recycling at different houses in town. *(Recycle truck collects items from each child and places in bin or bag.)* The truck then drives to the recycling plant, where it dumps all the material on the tipping floor. *(Truck gently dumps items on the towel in the center of the circle.)*
2. From the tipping floor, a **conveyor belt** moves the material through the plant. *(Two conveyor belt kids pick up each end of the towel, holding the material inside, and bring it to the different machines).*
3. The **screen sorter** sorts the paper by size. *(Screen sorter removes paper and makes a stack, ordered by size).*
4. The **rotating magnet** pulls out metal that is magnetic. *(Rotating magnet takes out food cans, using magnet, if available, to check which cans are magnetic).*
5. The **eddy current*** pulls out aluminum that is not magnetic. *(Eddy current takes out soda cans).*
6. The **optical sorter** uses a laser to sense different kinds of plastic. It removes containers from the belt with a jet of air *(Optical sorter “blows” plastic off the belt, arranges by type).*
7. The **human sorter** makes sure that everything goes to the right place. *(Human sorter walks around to check on what the machines have removed, and takes the plastic grocery bag, which can damage the machines).*
8. The **baler** crushes each type of material together into a large, heavy square bale. *(Baler walks around, collects material, pretends to crush and tie, and puts back into the recycle truck bag or bin).* After the material is baled, it’s put on trucks and transported to factories that will make it into new products.

* Eddy currents use powerful magnetism and electricity to sort the aluminum cans.