

CLOSED LOOP RECYCLING OF ALUMINUM CANS

Objective: Students will demonstrate the closed loop recycling of aluminum cans.

Illinois State Goals: 12.E., 13.B., 15.B.

Top Book Hits:

Recycle! by Gail Gibbons; **ISBN-13:** 978-0316309431

The Adventures of an Aluminum Can: A Story About Recycling
by Alison Inches; **ISBN-13:** 978-1416972211



Materials Needed:

- Aluminum can pattern
- Closed loop worksheet
- Scotch tape/glue
- Scissors

Procedure:

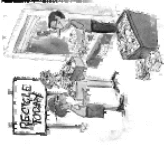

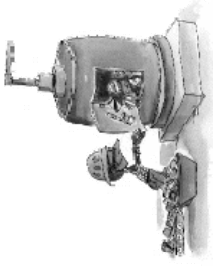

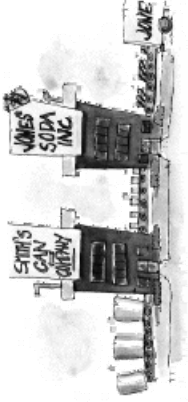
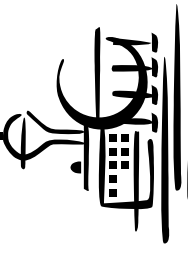
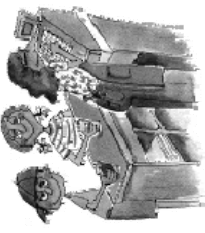
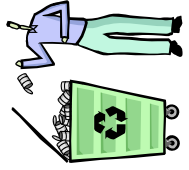
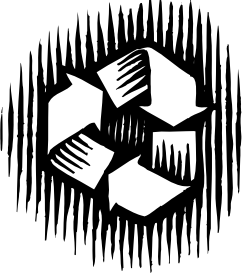
1. Discuss with the students natural resources and the fact that they are limited.
2. Talk about aluminum being made from bauxite ore, a nonrenewable resource.
3. Discuss recycling.
4. Explain that aluminum made from recycled cans saves about 95% of the energy needed to make a new can out of the bauxite ore.
5. Talk about the steps in the aluminum can closed loop of recycling. (It takes about 6 weeks for the can that you recycle to be made into a new can and ready on the store shelves for you to purchase.)
6. Have students make the loop by gluing/taping the steps together with words facing outward.
7. Cut out the cans; insert the loop between the two cans and glue top and bottom of can together.
8. The loop can be moved through the can, showing the closed loop cycle of the aluminum can.
9. The loop can go on and on, never breaking unless someone doesn't recycle their can.

Give credit where credit is due...this is an extension of EPA lessons on closed loop recycling.



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Closed Loop Recycling

 <p>1. Aluminum cans are collected and sent to a recycling center.</p>	 <p>2. At the recycling center, the cans are cleaned, crushed and baled.</p>	 <p>3. The used cans go to the aluminum manufacturing plant.</p>
 <p>4. It is rolled into long, thin sheets, coiled and sent to the can manufacturing plant.</p>	 <p>5. The cans are made at the manufacturing plant.</p>	 <p>6. The cans are filled at the beverage factory.</p>
 <p>7. The cans are sold at the stores.</p>	 <p>8. The cans are recycled to start the whole process again.</p>	 <p>9. The cans go back to the recycling center</p>

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