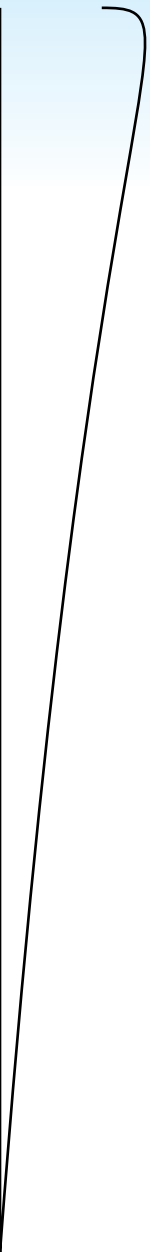


Teach English, Teach About

NMENT









Introduction

As a teacher of English for Speakers of Other Languages (ESOL), you know that your classes are extremely popular with immigrants and long-term visitors to the United States. These classes provide not only the opportunity to learn English but can serve as a portal through which many newcomers pass as a first step in integrating themselves into their new communities and American society.

The Environmental Protection Agency (EPA) has developed the *Teach English, Teach about the Environment* curriculum to help you teach English to adult students while introducing basic concepts about the environment and individual environmental responsibility. These concepts can help the newly-arrived be part of cleaner and healthier communities by understanding and practicing the “3Rs” of solid waste management – reduce, reuse, recycle. “Background Information – The 3Rs of Solid Waste Management” on page 40 should be read before using this curriculum.

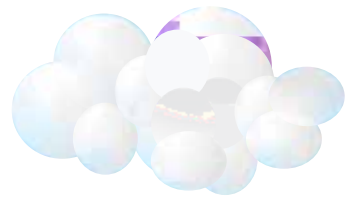
The curriculum uses a hands-on, multi-sensory, multi-media approach to show how personal behavior can improve the overall environmental well-being of the family, home, and community. Lesson plans are provided for the beginner, intermediate and advanced student. Each lesson plan has a language as well as an environmental objective. It also provides background on the environmental objective, a list of materials needed, a glossary of terms used in that lesson and a worksheet. Lessons should be introduced when the adult learner is already familiar with the grammatical construction emphasized in the materials. Flash cards and picture files are also included.

We hope that you find
about the Environmn28.207TJT1_a glofulbe part of

Note to Instructors

The *Teach English, Teach About the Environment* curriculum is a series of lessons related to reducing, reusing and recycling waste. The lesson plans in the curriculum should be introduced after the adult learner is already familiar with the grammatical constructions emphasized in the materials. The curriculum should be used as a supplement to your traditional teaching materials.

You should introduce and teach the vocabulary, as most students would probably be unfamiliar with environmentally-related words.



Solid Waste Focus: Recycle

Environmental Objective

Identify common environmental values held in the United States related to recycling, reusing and reducing the waste stream.

Materials Needed

Pictures a, b, c, d and e

Flash Facts 1, 2, 3 and 7

Newspapers, aluminum cans, glass bottles, plastic containers, boxes color-coded to match marked (glass, paper, plastic) receptacles for recycling.

Background for the Teacher

Recycling is an important way we can save energy and conserve natural resources. Many communities require residents to recycle and provide special color-coded receptacles for sorting and collecting the items to be recycled. Become familiar with your community's procedures for recycling. Determine if there are any penalties for failing to recycle.

Language Objectives

1. Simple present tense first person singular and plural
Examples: "I recycle glass." "We recycle newspaper."
2. Adjective-noun order
Examples: glass bottle, aluminum can

Vocabulary

aluminum
plastic can (s)

newspaper (s)
recycle

glass
bottle (s)

Procedures

1. Post Flash Facts and pictures before class arrives. Arrange recyclable items on a table.
2. Review related Flash Facts. Emphasize how recycling helps to conserve natural resources.
3. Examples: "I recycle newspaper." "I recycle glass." "I recycle plastic." Place the items being recycled in the appropriate container. Use related picture files as your model.
4. Take items out and have students say the same phrases as a group.
5. Have groups of students say "I recycle _____" depending on what type of item the teacher holds up.

6. Ask pairs of students to volunteer to say the correct phrase depending on what item is being held up.
7. See if individuals are willing to try the activity alone. Do not force them to talk if they do not want to.
8. Repeat 2, 3, 4 and 5 using “we” instead of “I”.
9. Provide students with Worksheet #1. Show one answer on the board.
10. Assign Civic Integration Activity and Home Support Activity.
11. Have students report back what they observed. Emphasize how the words they’ve learned relate to values in the United States.

Civic Integration Activity

1. Ask students to observe whether their neighbors recycle their waste.
2. Ask students to observe whether the school or their workplace recycles waste material.
3. Ask at the following class what they observed.

Home Support Activity

1. Have students identify what items they could have recycled over a week’s time. List items. Discuss which natural resources would be conserved if the items were recycled. Relate to Worksheet #2
2. Have students weigh themselves on their bathroom scale at home. Then have them weigh themselves with the bag of household garbage thrown out each day. Multiply the weight difference by seven days, 30 days, and 365 days to get a sense of the amount of garbage generated by each student. Chart on board. Compare to Flash Fact #1.

Name: _____ Date: _____

Fill in the missing letters.

1. I _____ newspaper.
2. I recycle aluminum _____ .
3. I recycle _____ .
4. I _____ g _____ .
5. _____ r _____ newspaper.
6. W _____ aluminum _____ .
7. _____ r _____ y _____ n _____ .
8. We _____ c _____ .
9. We _____ _____ s s .

Solid Waste Focus: Recycle

Environmental Objective

Identify common ways to recycle in our daily lives.

Materials Needed

Pictures a, b, c, d, e, f

Flash Facts 1, 3, 5, 6, 7

Additional Materials - Newspapers, aluminum cans, glass bottles, plastic containers, boxes color-coded to match community receptacles for recycling.

Background for the Teacher

Recycling includes collecting, sorting and processing certain solid waste into raw materials for re-manufacture into new items. Look for a “c” on the bottom of plastic containers. It means the container can be recycled. Many recyclable plastics can also be identified by the letters HDPE (milk jugs) and PET (soda bottles). When consumers purchase products manufactured from recycled material they close the recycling loop.

Language Objectives

1. Review simple present tense first person singular and plural

2. Introduce second person.

Example: “You recycle newspaper.”

3. Introduce third person singular.

Examples: “He recycles _____.”

“She recycles _____.”

4. Introduce plural forms with “s”.

Example: “She recycles _____”.

Vocabulary

aluminum
plastic
glass

newspaper (s)
recycle
conserve

natural resources
can (s)
bottle(s)

Procedures

1. Arrange recyclables and receptacle boxes on the table. Have several examples of each recyclable on the table.
2. Review with class: “I recycle _____.” “We recycle _____.”
3. Have class provide choral response.
4. Repeat with “He recycles _____.” She recycles _____.”
5. Reinforce plural “s” forms: “I recycle glass bottles.” “We recycle glass bottles.” Hold up examples as the class repeats the activity. Repeat for all items.
6. Form small circles of 6 to 10 students and model.
7. “I recycle newspaper.” “You recycle newspaper.” Point to a person and accentuate “you”. Continue around the circle, passing the items as they speak.
8. Change the items until every group has used newspaper, can(s), glass, and plastic.
9. Discuss other ways to recycle in our daily lives.
10. Identify the natural resources. Ask how recycling helps to conserve natural resources.
11. Have students complete Worksheet #2.

Civic Integration Activity

1. Have students recycle items used or consumed during breaks. Example: cans, bottles, plastic or newspaper.
2. Have them deposit recyclables in the containers as they come in from break.

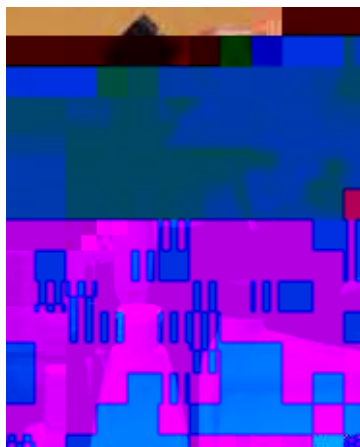
Home Support Activity

Have students create a recycling-related picture with a younger family member or friend. See “How My Family Recycles” at www.epa.gov/osw/kids/pdfs/jellyjar.pdf. Select a picture to color. Discuss the page selected.

Name: _____ Date: _____

I, You, and We

A. Complete



p _____



g _____

b _____



n _____

Solid Waste Focus: Reuse

Environmental Objective

Identify reuse of common items normally thrown away.

Materials Needed

Pictures a, b, c, d, g, h

Flash Facts 1, 3, 5, 6, and 7

Additional Materials - Plastic jug, aluminum can, glass bottle

Background for the Teacher

There are many creative ways to reuse items which might normally find their way into the waste stream: old shoe boxes can be used for storage, plastic containers for planters, etc. Students can also donate or give away items rather than throwing these items into the waste stream. For a large number of unwanted items, students can hold a garage sale. They can also be encouraged to shop at garage sales before buying new!

Language Objectives

1. Interrogatives with “How”
2. Responses with “Can” for possibility

Vocabulary

| | | |
|-------------------|-------------|------------------|
| aluminum can (s) | plastic | reuse |
| container (s) | produce | source reduction |
| garbage | product (s) | waste |
| natural resources | recyclable | |

Procedures

1. Explain to the class that reuse of an item is a way to save our natural resources.
2. Pair students or create small groups of three to discuss how to reuse each of the items in the picture from the Picture Files. Allow students three to five minutes per item to brainstorm.
3. Have students report to class by pairs or groups. Ask: “How can you reuse a glass bottle?”, “How can you use a plastic container?”
 - a. I can reuse a glass bottle to/for _____.
 - b. I/we can reuse plastic containers for/to _____.
 - c. I/we can reuse plastic containers for/to _____.

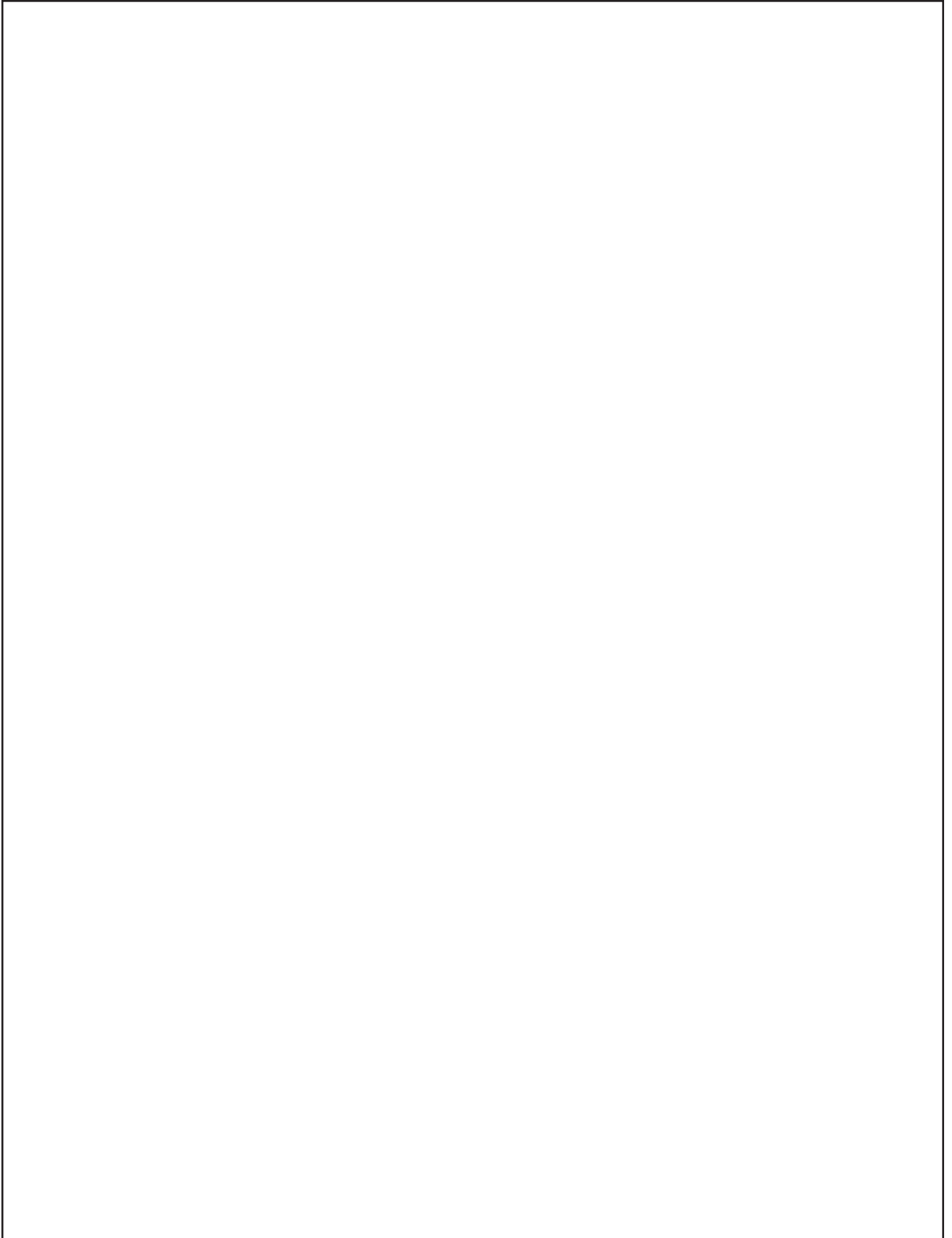
4. List responses on board. Review how reuse of items reduces the waste stream, contributes to source reduction, and conserves resources.
5. Have students complete Worksheet #3.
6. Assign Civic Integration and Home Support Activities.
7. Have students report back what they observed. Have students display their creative reuse of items.

Civic Integration Activity

Ask students to observe ways local businesses or their neighbors may have reused items to decorate or for practical purposes; for example, turning used tires into planters.

Home Support Activity

Ask students to reuse an item in a creative way. Have them bring the item(s) to class for display. Vote on the most creative, prettiest, etc. Give prizes or paper ribbons.



Solid Waste Focus: Reduce

Environmental Objective

Identify easy ways to reduce the waste stream.

Materials Needed

Pictures a, b, c, d, g, h, and i

6. Ask students if anyone ever gave a friend or family member something they no longer used. Share the idea of a swap meet where students bring in items they no longer want, and, in turn, swap or give the item to fellow classmates. Emphasize how the leftover items could be donated to a church or charity.
7. Using the students display the items collected and conduct an in-class swap meet. Donate any leftover items.
8. Summarize ways to reduce the waste stream. Emphasize how reducing the waste stream conserves natural resources.

Civic Integration Activity

Using the churches or charities identified in Procedure 5, have the students collect items for them. Donate the items.

Home Support Activity

Assign students to collect unwanted but usable items to either swap in class or to donate to a specified church or charity.

Solid Waste Focus: Recycling, Reusing, Reducing

Environmental Objective

Compare and contrast environmental values held in the United States related to recycling, reusing, and reducing to those held in countries represented by students in the adult ESOL class.

Materials Needed

Pictures k, a, b, c, d, e, f, i

Flash Facts 6, 10, 11, 12, 15, 16, 17

Photos of trees, recycling receptacles, excessive packaging, glass, cans, etc.

Background for the Teacher

Recycling saves natural resources. It also saves energy and reduces human impacts on the climate. Paper and aluminum are recycled with great success. Successful recycling, reducing and reusing means less depletion of dwindling natural resources. International values related to recycling, reusing and reducing may vary. Compare and contrast your students' values related to recycling, reusing, and reducing.

Language Objectives

1. Questions with auxiliary verb "Did"
2. Interrogative words "What," "Why," "How"
3. Simple past tense responses

Vocabulary

container (s)

excessive

packaging

reusable

shopping bag (s)

paper mill (s)

forest (s)

waste stream

item (s)

Procedures

1. Post pictures and flash facts before class arrives.
2. Discuss the beauty of the natural environment reflected in the picture of the trees. Ask if forests exist in their countries. “Did you have forests in your country?” Chart responses by country.
 - a. Did you recycle paper in your country?
 - b. Did you recycle other products?
3. Ask: Did you reuse items in your homeland?
Have students pair off and discuss how they reused items in their homelands. Give them five minutes to discuss, and then share responses. Chart answers by country, listing what items were reused and how they were reused.
4. Discuss pictures showing excessive packaging. Was so much packaging really needed? Why do manufacturers like excessive packaging? Have students compare and

Name: _____ Date: _____

-
1. How was solid waste handled in your homeland? Was it collected, and taken to a landfill? Burned? Who took care of these activities?
 2. What were people's attitudes toward waste?
 3. Were people concerned about conserving natural resources?
 4. Other comments.

Solid Waste Focus: Recycle

Environmental Objective

Compare and contrast ways people recycle in each of the students' countries to recycling in the United States.

Materials Needed

Pictures (a) through (f)

Flash Facts 1, 2, 3, 10, 12, 13, 14, 15, 16, 17 and 18

Solid Waste Focus: Reuse

Environmental Objective

Compare and contrast ways people reuse items both in the United States and in the students' native countries.

Materials Needed

Pictures a, b, c, d, g, and h
Flash Facts 2, 5, 9, 14, 17, 18

Background for the Teacher

Throughout the world, people have been very resourceful in reusing items. Your students may contribute very creative and clever ways containers are recycled for other uses, including children's games, planters, etc. Reusing items helps save energy and conserves natural resources.

Language Objectives

1. Interrogative words with simple past tense
Examples: "How did?" "Why did?" "What did?"
2. Simple past responses
Examples: "I reused." "We reused."
3. Plural with "s" with an emphasis on pronunciation of plural sounds

Vocabulary

| | | |
|---------------|------------------|-----------------|
| charity (ies) | reusable | garage sale (s) |
| donate | recycled content | product (s) |

Procedures

1. Post Pictures and Flash Facts before class arrives.
2. Remind students how recycling and reusing items made of glass, aluminum or plastic helps to conserve our natural resources. Use Pictures Files a, b, c, and d to illustrate your point. Incorporate the Flash Facts into your discussion of reducing the waste stream. Relate these facts to conserving resources.
3. Pair/group students to discuss ways people reused glass, aluminum or plastic items in their native lands. Allow them to share for five to seven minutes. Elicit responses to "My neighbor reused _____."

4. Bring the group back together and share ways containers and items were reused. Elicit responses to “We reused _____ for _____.”
5. Using Picture Files or real objects prompt the students to answer the following questions. Make sure they correctly pronounce the --ed endings of the verb in their responses.
 - a. What did we recycle?
We recycled _____.
 - b. What did they sort?
They sorted _____.
 - c. What did you rinse?
I rinsed _____.
 - d. What did I reuse?
You reused _____.
 - e. What did we collect?
We collected _____.
 - f. What did you reduce?
I reduced _____.
6. Ask if people held garage sales in their homelands. Ask how these helped to conserve resources.
7. Assign Worksheet # 1.
8. Assign Civic Integration and Home Support Activities.

Civic Integration Activity

1. Have students observe ways people in their neighborhoods or communities have reused items. Ask them to share what they observed.
2. Have students stop at a garage sale and report what was being sold.

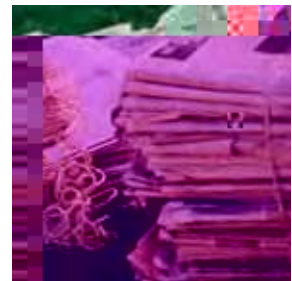
Home Support Activity

1. Have students use common containers (empty jelly jars) and create new uses for them. Have them bring the items in for a class display.
2. Ask them to demonstrate children’s games played with reused containers or items.
3. Download “Follow That Trail” from EPA’s web site. Read and discuss page 5 with the youngsters in their families.

Name: _____ Date: _____

Complete the sentences

1. What did you reuse?
I reused _____.
2. What did you collect?
I collected _____.
3. What did they collect?
They collected _____.
4. What did you rinse?
I rinsed _____.
5. What did they sort?
They sorted _____.
6. Summarize ways we can reuse items. Have class contribute to the summary.



Solid Waste Focus: Reduce

Environmental Objective

Compare and contrast ways to reduce the solid waste stream in our daily lives.

Materials Needed

Civic Integration Activity

1. Coordinate a class garage sale either at school or at someone's home.
Donate any funds and unsold items to a local charity.
Emphasize how reducing the waste stream helps conserve natural resources.
2. Explore on the Internet ways to reduce the waste stream.
Visit www.epa.gov/ows/. Use local libraries to access the Internet, if students do not have a computer at home.

Home Support Activity

1. Have students collect items to contribute to a class garage/tag sale. Explain that unsold items will be donated. Explain how reuse of an item reduces the waste stream; invite friends and family to participate.

Holding a Tag Sale/ Garage Sale

Checklist

- Chose a location: school, community center, church yard. Make sure it's accessible by public transportation and/or has parking.
- Determine date and time for garage sale. Make sure the day and time don't conflict with other planned events.
- Make signs announcing the sale and post them around the school, community center or neighborhood. You might also want to advertise in the local newspaper.

Ask students to collect items they no longer need or us1_3 1 Tf-0.0001 Tc 0.0295 Tw 13 re

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Solid Waste Focus:

Reduce, Reuse, Recycle

Environmental Objective

Identify and analyze the reasons for the values held in the United States related to the 3Rs of solid waste management: reduce, reuse, recycle.

Materials Needed

Pictures a, b, c, d, e, f, k

Flash Facts 1, 6, 7, 10, 11, 12, 14, 16, 17, 20, 21, 23

Background for the Teacher

The United States' economy has an enormous need for raw materials to supply its manufacturing sector. Use of these raw materials can tap domestic natural resources to the point of depletion. Natural resources cannot be replaced quickly. Practicing the 3Rs also helps the U.S. conserve energy and reduces the impacts on climate change. In this lesson, students will analyze and discuss the impact of an industrial/manufacturing economy on a country's natural resources.

Language Objectives

1. Oral presentations on reducing, reusing, and recycling
2. Short oral or written description of reducing, reusing, and recycling practices in the students' homelands

Vocabulary

| | | |
|--------------------|--|--------------|
| conservation | resource (s) | disposal |
| waste minimization | environmentally preferable product (s) | waste stream |

Procedures

1. Post Pictures and Flash Facts before class arrives.
2. Welcome class and pose the question "How do we know the United States has a prosperous economy?" Follow up with "What contributes to a prosperous economy?"
3. List on the board the indicators of United States prosperity. List the contributing factors to a prosperous economy.
4. Ask which products of prosperity tap natural resources. Determine which natural resources are tapped. Example: "Luxury cars use steel. Steel is made from iron."

6. Call group back together and list the reasons given by each pair or group for conserving resources.
7. Relate to the class reasons for the environmental movement's focus on recycling, reusing and reducing solid waste.
8. Ask for definitions of reducing, reusing and recycling.
9. Ask students why people in the United States share these values.
10. Compare and contrast the values held in the United States with those held in the students' respective countries.
11. Summarize by stressing how reducing, reusing and recycling conserve natural resources.
12. Assign a short report on reducing, reusing and recycling in their homelands.

Civic Integration Activity

Have students work in pairs or groups to analyze the recycling, reducing and reusing habits they observe being practiced at a local business. Assign this assignment over a weekend. Have students report back.

Home Support Activity

Have students discuss with friends or family members resource recovery and how waste is managed in their home countries. Ask students to report back what was learned from their families and friends.

Solid Waste Focus: Recycling

Environmental Objective

Identify the solid waste that can be recycled in our daily lives.

Materials Needed

Pictures a, b, c, d, g, h

Flash Facts 6, 10, 13, 14, 15, 16, 17, 18, 20, 22, 23, 25, 27

Background for the Teacher

Much of the solid waste generated in our daily lives is not reused or recycled. Students should be challenged to think of creative ways to reuse or recycle the waste generated. Explore how businesses recycle. Challenge pairs or small groups of students to generate alternate ways to recycle or reuse. Encourage the use of the Internet to research topics.

Language Objective

Write an informational paragraph or short essay reporting what has been learned related to recycling practiced by local businesses.

Vocabulary

closing the loop

recycled content products

recycling loop

source reduction waste

hierarchy

Procedures

1. Post the Flash Facts and Pictures before the class arrives so students read and observe them before class begins.
2. Ask the class to recall the reusing and recycling habits they observed in their communities.
3. Have students form pairs or small groups to discuss other items which can be recycled. Consider auto tires, computer waste, etc.
4. Ask how these items could be recycled.
5. Bring groups back together to discuss what additional items could be recycled and list these items on the board.
6. Ask how items might be recycled.
7. Consider why some items are not recycled. Could costs be a factor?
8. How does purchasing items made from recycled material close the loop in terms of the recycling loop?

Advanced Level Lesson Plan 2

9. Explore commercial recycling practices after students have been assigned the civic integration activity. Discuss what students learn.
10. Have students write a short paragraph describing what they learned about how businesses recycle either in the United States or in their homelands.

Civic Integration Activity

Have students ask local businesses (tire store, print shop) whether they recycle any of their solid waste. Have students report back what they learn. Have them also find out whether their communities penalize or fine businesses for not recycling.

Home Support Activity

1. Have students ask family and friends to describe any recycling activities practiced by manufacturers or small businesses in their native lands. Where there any penalties or fines for not recycling? Have students report back to class.
2. Have students create an “art” collage or montage from recyclable waste. Display “art” and reward creativity.

Solid Waste Focus: Reuse

Environmental Objective

Recommend and discuss options for the reuse of items found in the solid waste stream in the community.

Materials Needed

Pictures a, b, c, d, g, j

Flash Facts 21, 22, 23, 24, 25

Background for the Teacher

Given that many students come from countries where reuse of items is common, students may enjoy contributing ideas from their respective homelands. Discussions and details may contribute to developing descriptive paragraphs or short descriptive essays complete with illustrations that can be posted on a hall bulletin board or in the classroom. Reuse of items contributes to source reduction and conservation of resources. Consumers close the loop when they purchase products made from recycled material.

Language Objectives

1. Students will make a brief oral presentation (3-5 minutes) on how an item was reused in their homeland.
2. Students will write a short descriptive essay on how products were reused in their homelands.

Vocabulary

closing the loop

waste stream

resource recovery

“from scratch”

source reduction

waste hierarchy

waste minimization

Procedures

1. Post Pictures and Flash Facts before the class arrives.
2. Discuss any Flash Facts students find particularly interesting. Allow between three to five minutes of discussion.
3. Compare and contrast reuse of items by asking the class to identify items that were reused in their respective native lands. List on the board. How is reuse related to resource recovery and source reduction?
4. Ask whether items reused in their native countries are reused here. Give examples.

5. Discuss examples of items which are thrown away by Americans, but would not be thrown away in the students' respective homelands.
6. Relate reuse of items as a way to reduce the waste stream, conserve resources and contribute to waste minimization.
7. Use the Pictures or real objects to ask the following questions:
 - a. Why should we recycle glass?
 - b. Why would you recycle aluminum cans?
 - c. Why should they recycle newspapers?
 - d. How would you reuse plastic containers?
 - e. How would you reuse egg cartons?
8. Assign Civic Integration Activity and Home Support Activity.
9. Assign students to write a short description of how items were reused in their homelands.
10. Ask students to read their descriptions in front of the class.
11. Create a class book of ideas to reuse items.
12. Assign Advanced Level Worksheet 1.

Civic Integration Activity

Have students describe or bring in items they found thrown away by Americans in the community which would not be thrown away in their native countries. Discuss why these items would not be thrown away in their homelands.

Home Support Activity

Ask students to bring to class items from their countries which are reused. Create a display of what students bring in. Have each student explain his/her item. Give prizes for the most creative reuse of an item.

6. Prepare students to participate in the Civic Integration Activity by identifying worthy local charities.
7. Assign both the Civic Integration Activity and Home Support Activity.
8. Have students develop a written narrative describing the class's efforts to collect donations for a local charity.
9. Have students share their narratives by allowing classmates of their choice to read their narratives.
10. Summarize ways to reduce the solid waste stream.

Civic Integration Activity

Identify a worthy community charity. Ask the charity what types of items they accept. Organize a drive to collect items which can be donated to the charity. Have volunteers help deliver the collected items. Take pictures for discussion. Write short essays about the activity. Students may also wish to hold a garage sale.

Home Support Activity

Have family help locate at home or among neighbors, items which can be donated to charity or used for yard sales.

Name: _____ Date: _____

Directions:

*Answer the following with full sentences.
Use Flash Facts or readings for your answers.*

1. Why should you recycle aluminum cans?

I _____
_____.

2. Why would you recycle glass bottles?

I _____
_____.

3. Why should we recycle newspapers?

We _____
_____.

4. How would you reuse plastic containers?

I _____
_____.

5. How would you reduce the waste stream in your personal life?

I _____
_____.

Preparing for Training

- ❑ Before conducting the teacher training, you should familiarize yourself with the components and lessons in the *Teach English, Teach About the Environment* curriculum.
- ❑ Determine where the training will take place. Ideally, the training environment should have a blackboard and a place to post pictures.
- ❑ Arrive early in order to post the Flash Facts to be used that day as well as any Picture File pictures. Set out the sign-in sheets as well as any materials that need to be distributed. Include evaluation forms for the training in order to get feedback on the day's activities. Remind participants to sign in as they arrive.

Conducting the Training Session

- 1.

Appendix 1 *Training ESOL Teachers*

6. Demonstrate a lesson. Remember that the grammar is used for review, not for new instruction. Explain that the purpose of the Civic Integration Activity is to encourage the student to get out in the community either to observe or interact. It is consistent with the literature on civic engagement. Note that the Home Support Activity extends learning to the family.

Accessing United States Environmental Protection Agency Resources

Trainers or teachers interested in using these materials should begin their preparation by visiting the United States Environmental Protection Agency Office of Solid Waste website at www.epa.gov/osw/.

For general background on solid waste management, visit the portions of the Office of Solid Waste (OSW) section on reducing, reusing and recycling. Sections such as “Basic Information” and “What You Can Do” could be helpful. Print selections from “Publications/en Español” which are age-appropriate and suited for the ethnic background of your students.

For additional background, click on “Reduce, Reuse and Recycle,” which gives more information on the 3Rs. Under “Basic Facts,” you will find interesting data related to waste generation before recycling.

For more detailed municipal solid waste (MSW) information, go to MSW State Data at www.epa.gov/msw/states.htm and click on your state. There you will find state-specific discussions on solid waste management.

These state-specific solid waste management discussions will help you prepare your lessons and focus classroom activities and assignments. For example, by asking “What is your state’s waste tire disposal program?”, you will encourage advanced students to visit the website and report back the information either in an oral or written report.

For information on environmental education resources, go to www.epa.gov/education/

Appendix 2 *Using this Resource*

Recycle

Recycling includes collecting, sorting and processing certain solid waste into raw materials for remanufacture into new items. When consumers purchase products manufactured from recycled material, they close the recycling loop.

Glass, aluminum, plastic, newspaper and cardboard, are among the most commonly recycled

**Americans produce about
4.5 pounds of garbage
per person, per day!**

**Recycled glass
can be used
again and again.**

Recycle containers at your school.

**Use recyclable
products.**

**Using less saves
natural resources.**

**Look for products that
use less packaging.
This reduces waste.**

**Bring a reusable
bag when shopping.**

**Recycled materials
are used to make
new products.**

**Recycling reduces
the use of virgin
materials and reduces
greenhouse gases.**

**Recycling one aluminum
beverage can save enough
energy to run a 100 watt
light bulb for 20 hours,
a computer for 3 hours
or a TV for 2 hours.**

**Avoid contaminating
recycling containers
with waste.**

**Buying recycled products
saves energy, conserves
natural resources
and reduces waste.**

**45 percent of all
aluminum cans
are recycled.**

**Recycling one ton of
paper saves 17 trees,
7,000 gallons of water,
and 380 gallons of oil.**

**Source reduction
includes copying and
printing double-sided.**

Donate old cl5 thes and

**Americans recycled
42 million tons
of paper in 2005.**

**Recycling aluminum
cans saves 95 percent
of the energy required
to make aluminum
cans from scratch.**

Americans recycled 21.6 percent of all glass jars and bottles in 2005.

**Recycling glass uses
30 percent less energy.**

Source reduction (waste prevention) includes reusing and donating items, buying in bulk and reducing packaging.

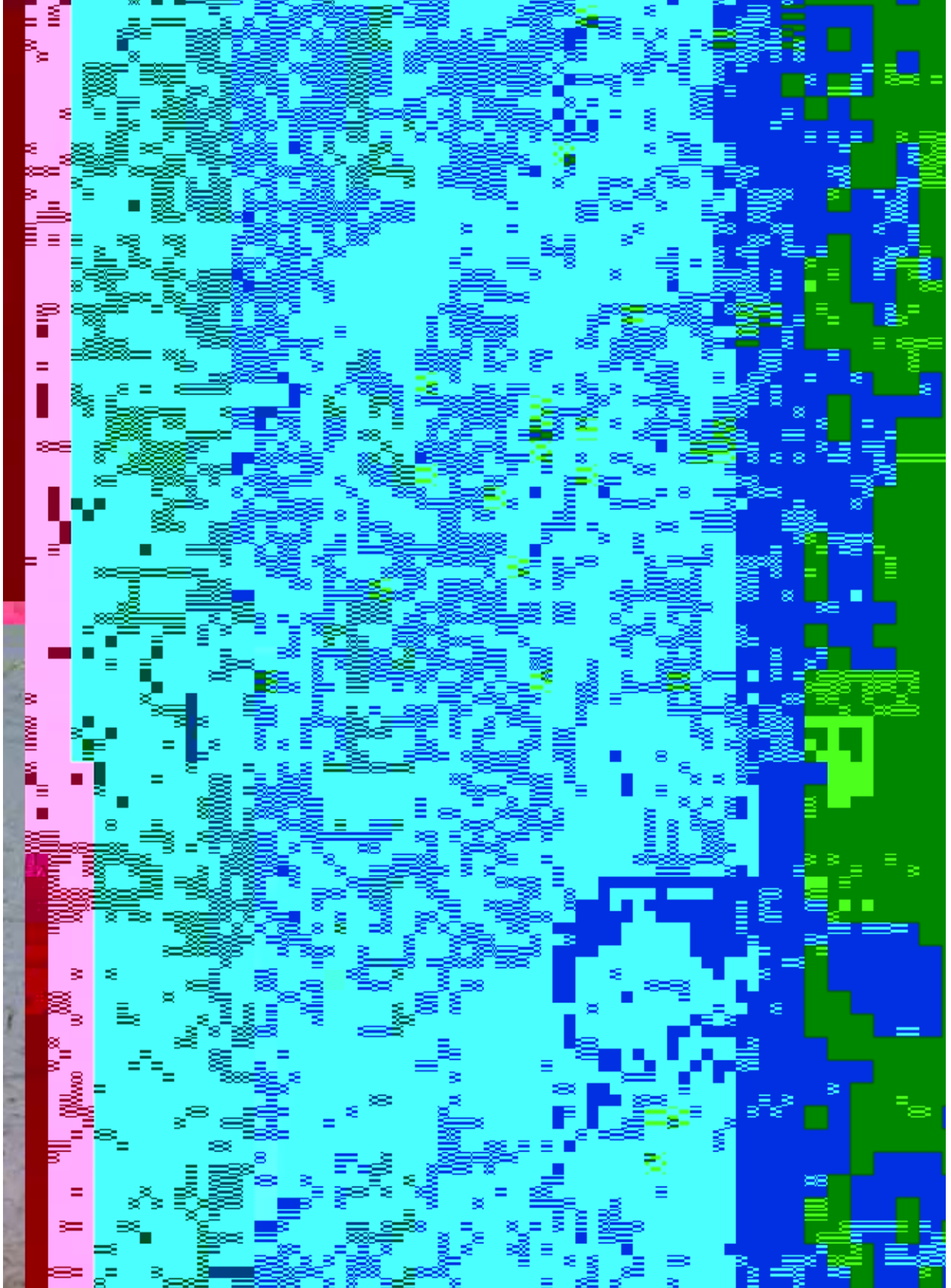
**Americans average 4.5
pounds of waste a day.
This equals 235
million tons a year.**

**The Environmental
Protection Agency (EPA)
advocates a waste hierarchy
involving source reduction,
reuse, recycling, combustion
and land filling.**

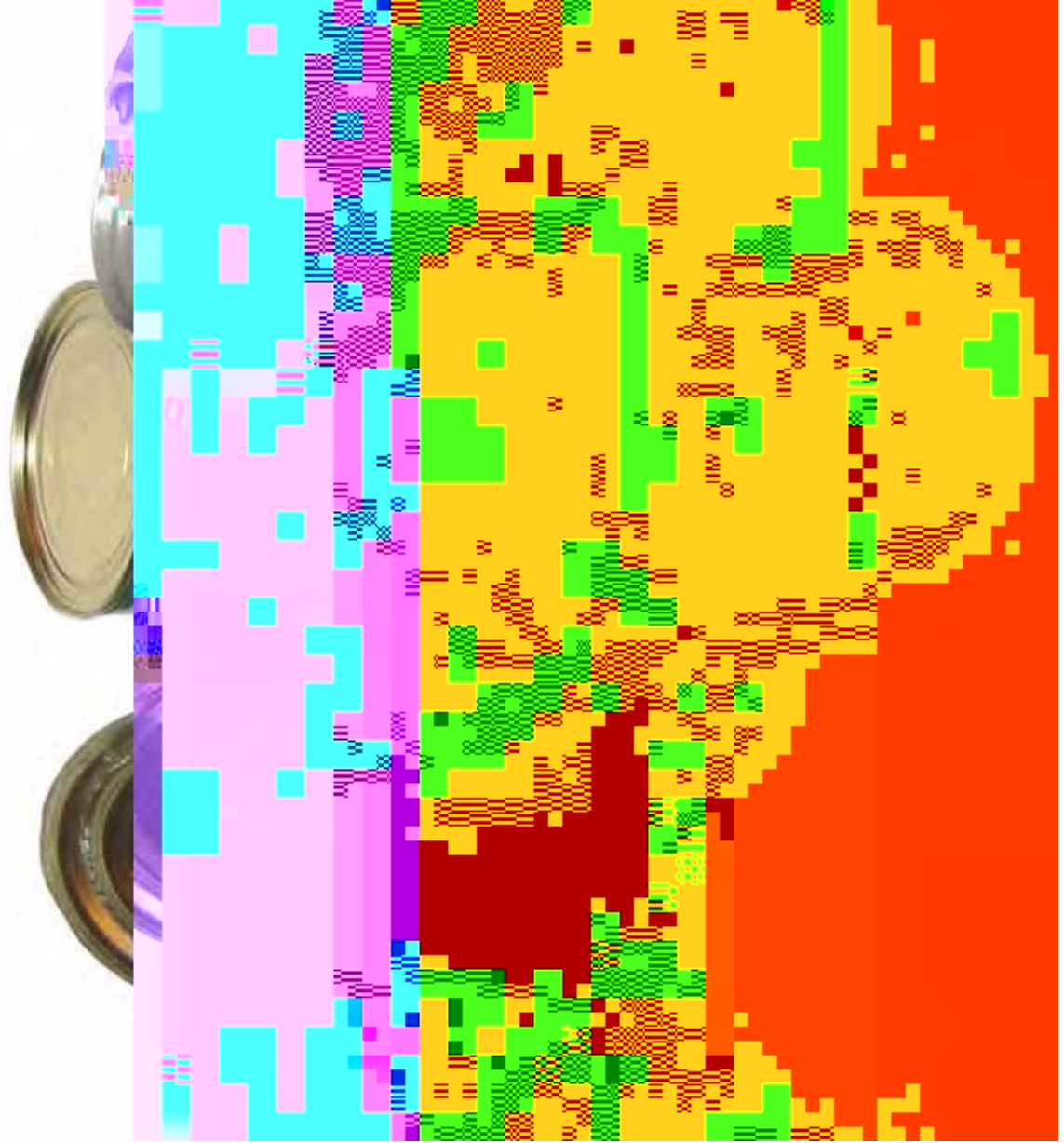
**Using recycled steel
to make new steel
saves energy.**

**EPA has set a national
recycling goal of 35
percent by 2008.**

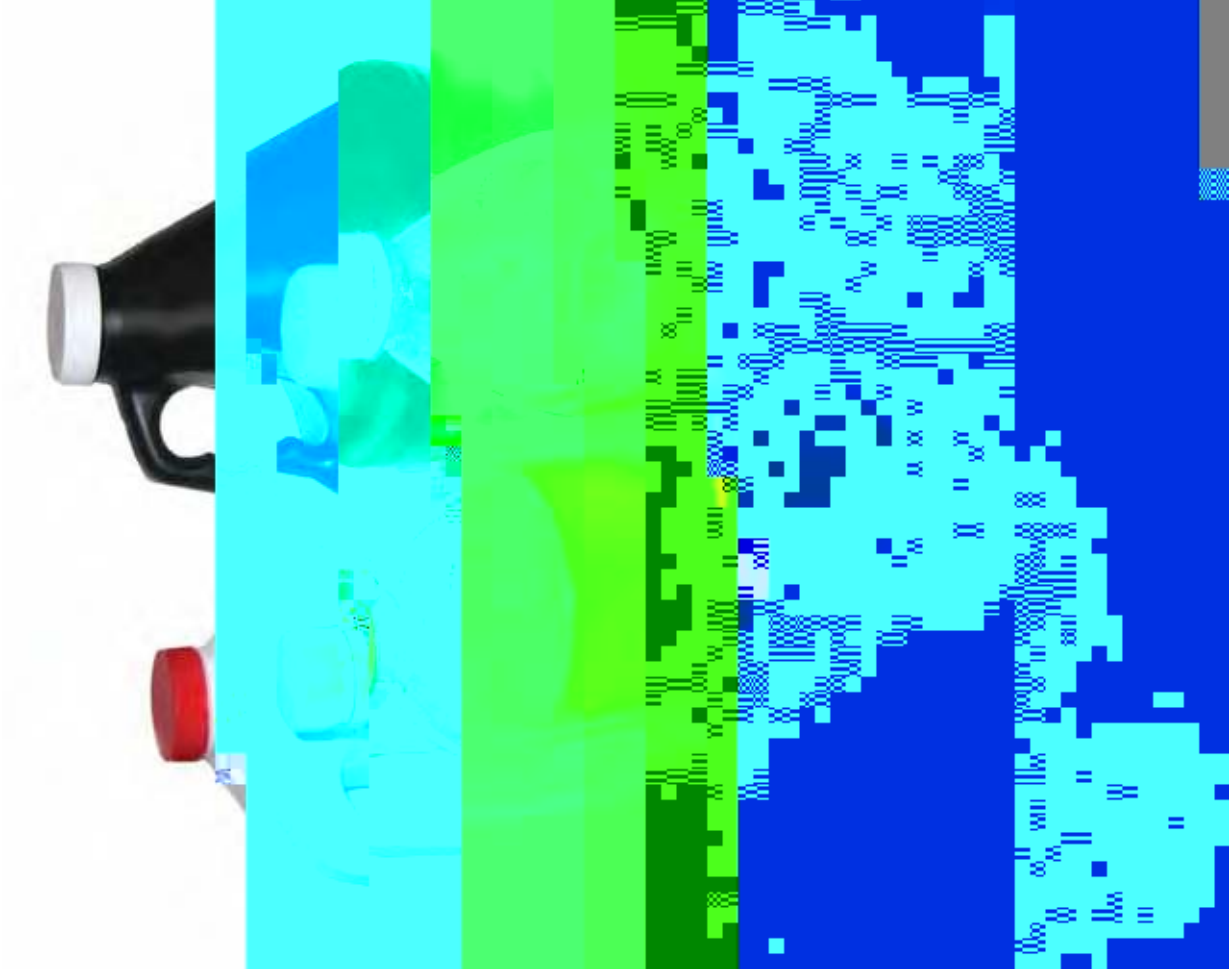
**Today's recycled-content
products perform just
as well as non-recycled
counterparts.**

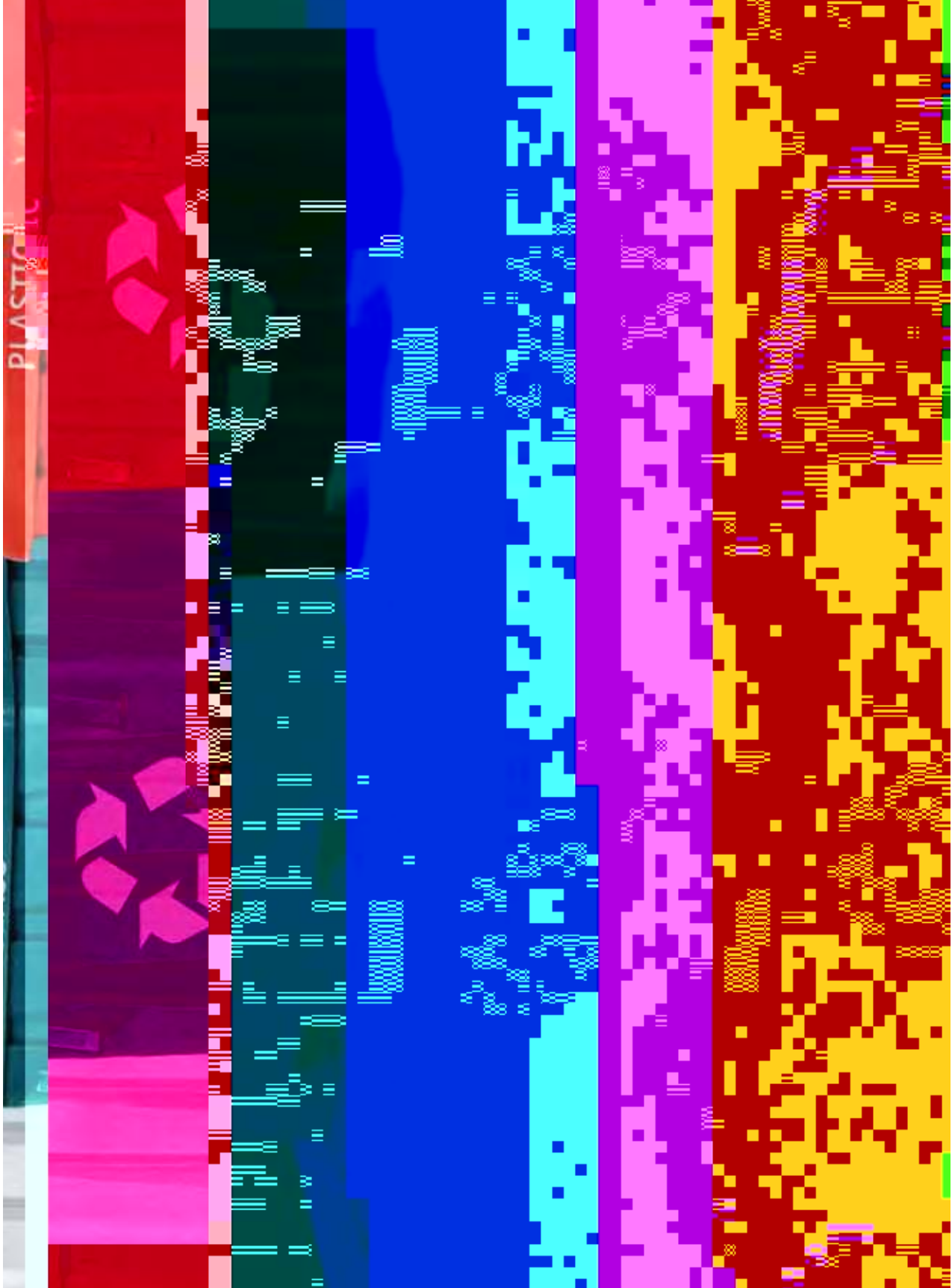


a — Glass Containers and Bottles



b — Aluminum Cans

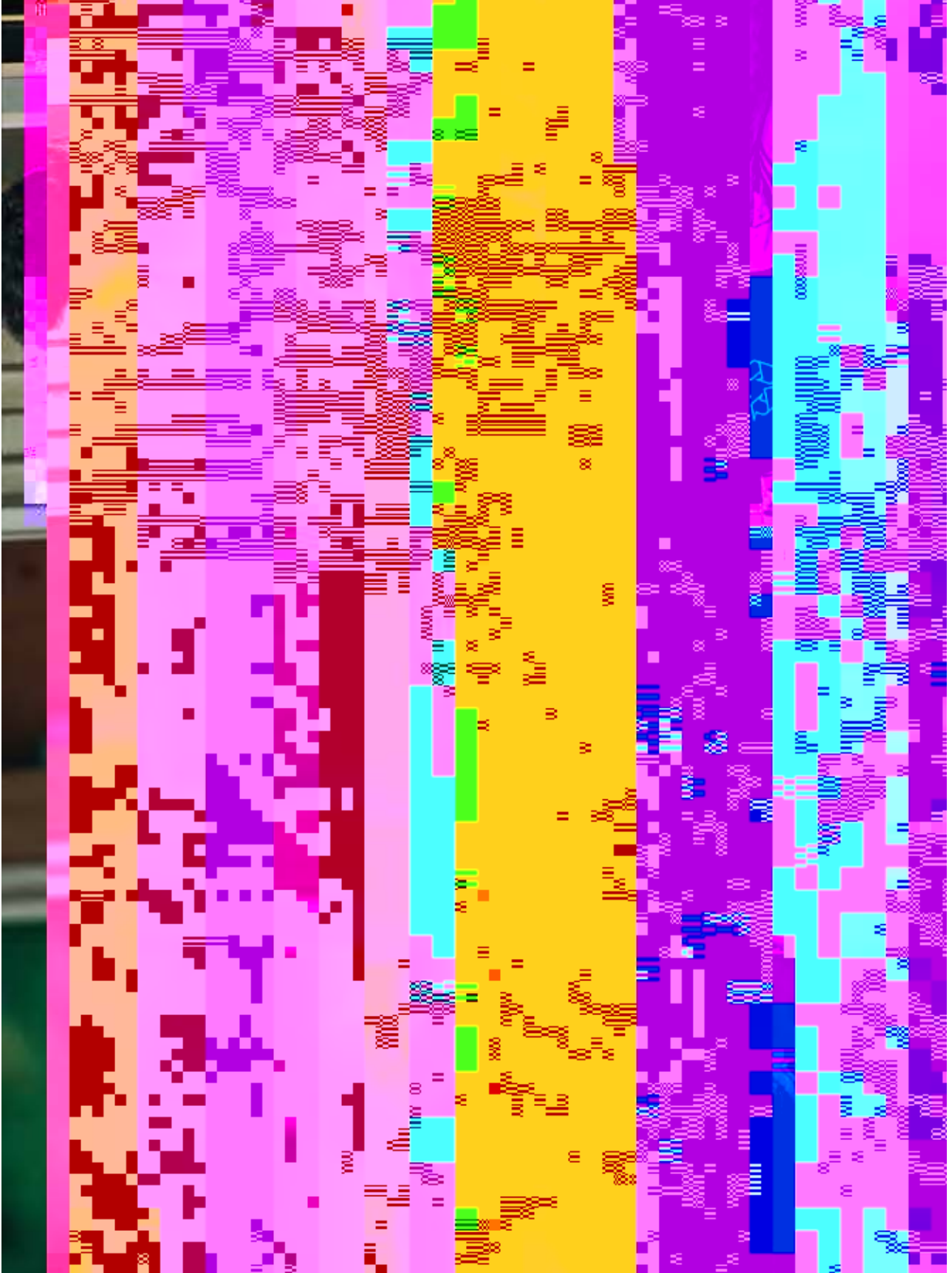


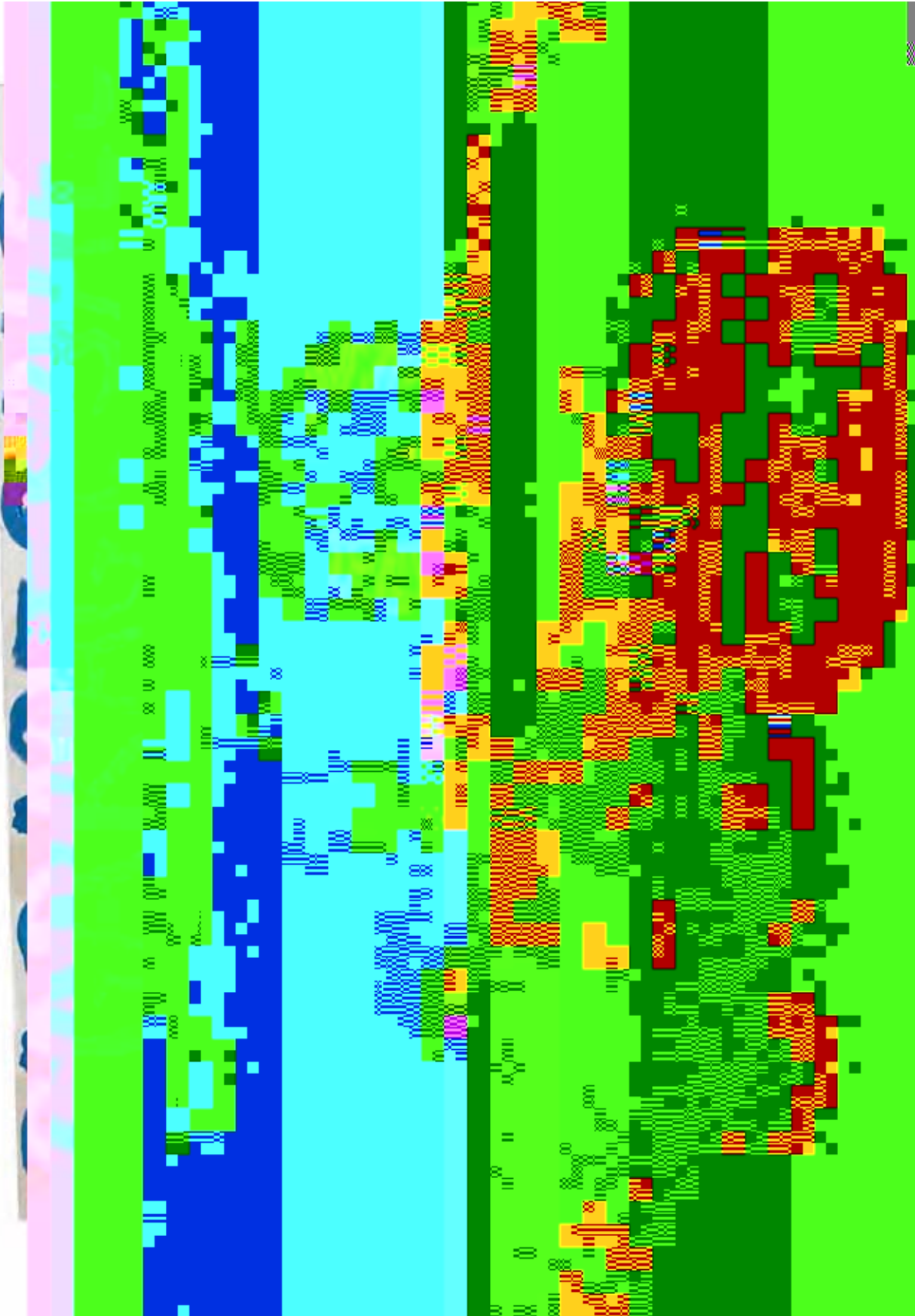


e — Recycling receptacles labeled and color-coded

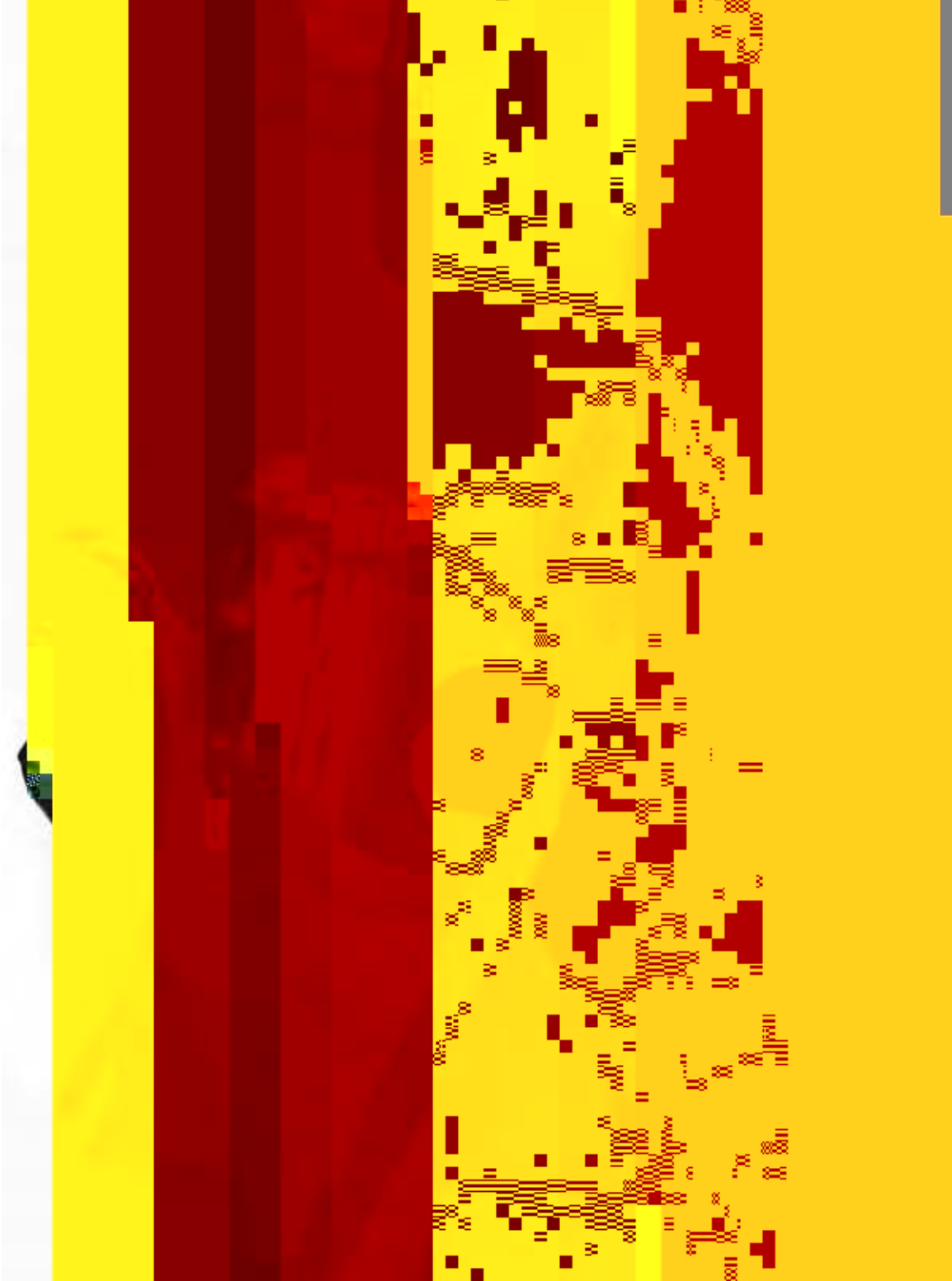


f — Symbol for recycled item

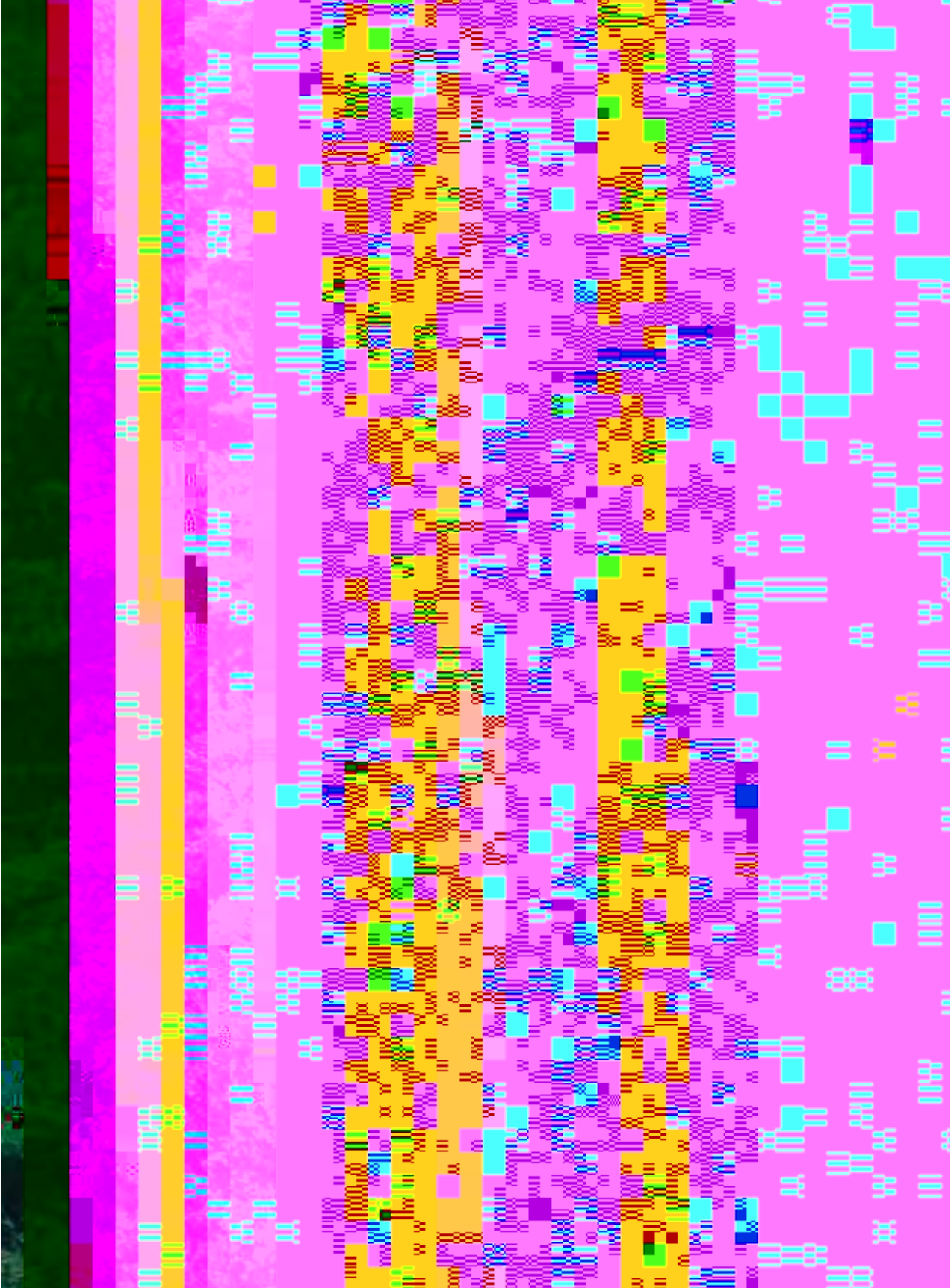




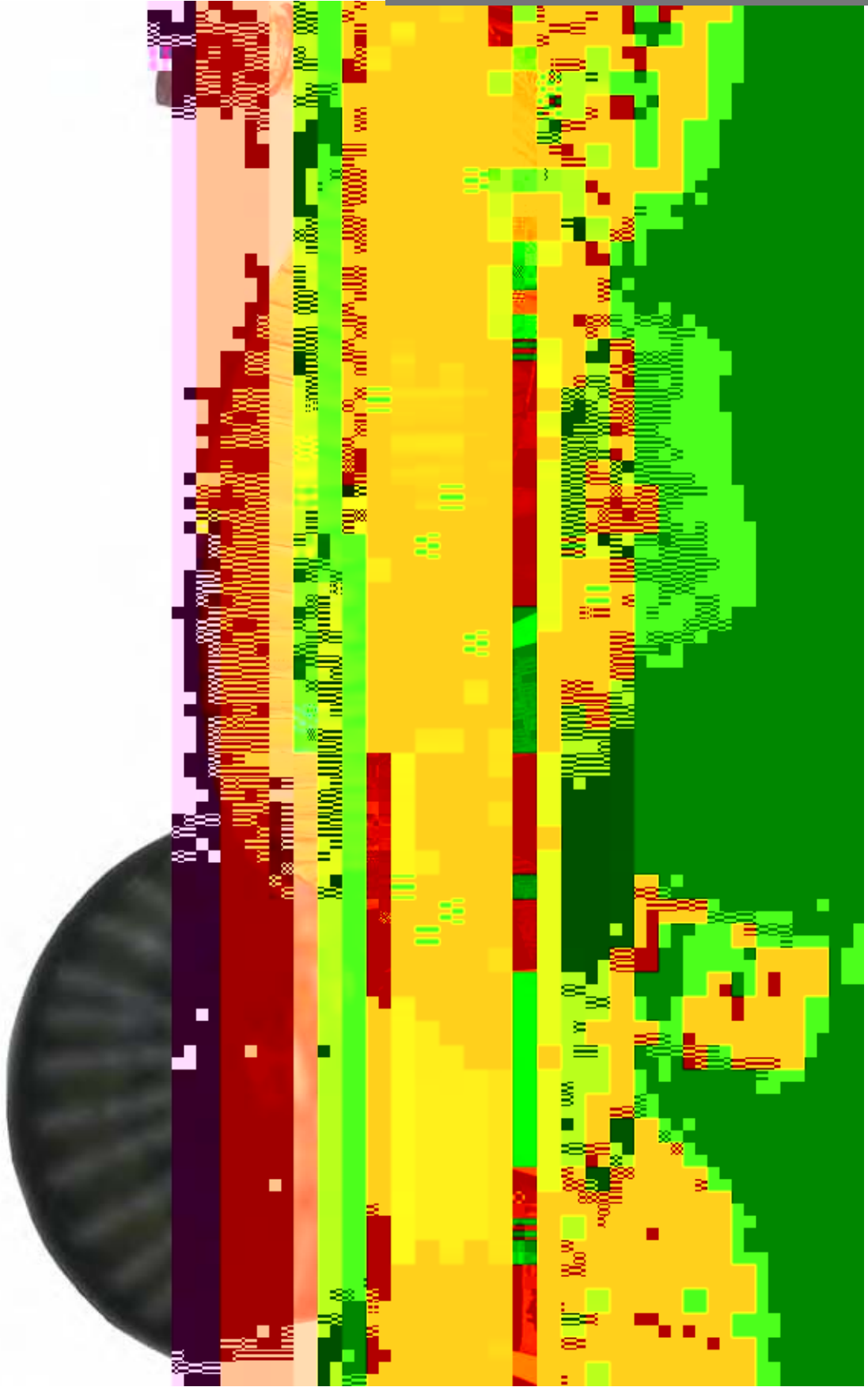
h — Garage Sale



j — Cloth bag for shopping, reusable food containers



k — Trees / Forest Scenery



1 — Items which have been reused for another purpose

www.epa.gov/osw

