

# ONE PLASTIC BAG: ISATOU CEESAY AND THE RECYCLING WOMEN OF THE GAMBIA

BY MIRANDA PAUL/ ISBN 13: 9781467716086

GIGI WOLF, FEDERAL RESERVE BANK OF KANSAS CITY

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## LESSON DESCRIPTION:

In this lesson, students will learn about responsible consumption and how the choices we make when disposing of trash can impact the environment. Students will listen to a story from the book *One Plastic Bag*, about an entrepreneur; watch a video about pollutants and distinguish between reducing, reusing and recycling. Students will interpret graphs and data within an infographic and demonstrate their knowledge of responsible consumption through developing their own infographic in collaborative groups.

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**GRADE LEVEL:** 3-6

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**CONCEPTS:** Responsible consumption; reduce, reuse, recycle; entrepreneur, income, consumer

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## OBJECTIVES:

Students will be able to:

1. Describe the importance of responsible consumption
  2. Explain how to be a responsible consumer
  3. Interpret charts and graphs
  4. Develop an infographic about responsible consumption
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**TIME REQUIRED:** Two 60-minute class periods

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## MATERIALS:

1. *One Plastic Bag: Isatou Ceesay and the Recycling Women of the Gambia*, by Miranda Paul (ISBN 10: 1467716081; ISBN 13: 9781467716086)
2. Visual 1: The Truth About Trash
3. Visual 2: *One Plastic Bag* Maps and Vocabulary
4. Handout 1, one for each student
5. Handout 1: Answer Key
6. "Plastic Pollution, Our Oceans, Our Future ..." Video (<https://www.youtube.com/watch?v=YGBpHYLNtRA>)
7. Handout 2: Infographic, one for each student
8. Handout 2: Answer Key
9. Handout 3: How Can We Be More Responsible Consumers?, one for each student
10. Handout 4: Infographic Summary, one for each student
11. Handout 4: Rubric

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## DAY 1 PROCEDURE:

1. Ask students to list things people throw away. (*Answers will vary and may include: food, cans, bottles, empty containers, used paper, things that are old or broken, etc.*) Record responses on the board or ask students to do so.
2. Ask students what they think it means to be a “responsible consumer.”
3. Tell students they will learn the importance of responsible consumption and how they can apply this to their lives and environment.
4. Explain how the things we throw away, also called trash or garbage, can be divided into different groups.
5. Show Visual 1, The Truth About Trash, and review as a class.
6. Tell students they will learn more about the three “Rs” throughout the lesson. Revisit items on the board and ask students to identify which of the four types of trash each belongs to and determine whether each could be reduced, reused or recycled.
7. Share that students next will examine how different types of trash impacted a community in Gambia, a small country in western Africa.
8. Explain that you will read *One Plastic Bag*, a story about a Gambian woman faced with the harmful effects of trash in her village because villagers were not being responsible consumers.
9. Use Visual 2 to highlight where Gambia is and review the vocabulary terms from the story.
10. Ask students to listen to how the woman led a movement toward responsible consumption in her community by using the three “Rs.”
11. Read the story and refer to Visual 2 throughout. *Teacher note: There are several terms in the book that students may not be familiar with, so pause to share definitions from Visual 2 as you read. You also might invite students to pronounce the vocabulary aloud throughout the story.*
12. After completing the story, ask:
  - What was the problem in Isatou’s village? (*Old plastic bags left on the ground were becoming hazardous to the environment; the consumers in Isatou’s village were not being responsible with their trash or old plastic bags.*)
  - What did Isatou do to make the situation better? (*Isatou discovered a way to clean and reuse the old plastic bags and to make them into purses that could be sold*)
  - In the story, how did Isatou demonstrate responsible consumption through reducing, reusing or recycling? (*Isatou reused old plastic bags that were thrown away and recycled them into purses for sale.*)
13. Explain that by solving this problem in her community, Isatou not only was a responsible consumer but also an **entrepreneur**. An entrepreneur is someone who takes the risk of producing a product or starting a new business.
14. Ask students what product or business Isatou and her friends created. (*They created purses made out of recycled plastic bags.*)
15. Share how Isatou’s new business created economic opportunity for herself and her friends because it allowed them to earn **income**, the money earned or received from different sources.
16. Explain that besides providing income for many people in the village, the purse business also benefited Isatou’s community because it helped the villagers to be more responsible **consumers**. Consumers are people who buy or use goods and services to satisfy their wants or needs.
17. Remind students how Isatou’s community was dealing with its old plastic bags by leaving them on the ground or burning them.
18. Ask students how Isatou’s actions in the story helped the environment. (*Answers may include: the trash no longer was piling up on the roads, dirty water and mosquitos were eliminated, animals weren’t eating trash and dying, the smell of plastic burning wasn’t in the air.*)
19. Distribute a copy of Handout 1, Reduce, Reuse or Recycle, to each student.
20. Share that when we reduce, reuse or recycle we are acting as responsible consumers by decreasing waste, which can help protect our environment.
21. Review the directions on Handout 1 and allow students time to complete all sections of the handout.
22. Share Visual 1 again for students to see definitions of reduce, reuse and recycle.
23. Walk through responses to the handout as a class using Handout 1 Answer Key.
24. Tell students they now will watch a short video that shows another example of not consuming responsibly.
25. The video provides examples of different types of trash and their effect on the environment, specifically

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the water. Young people in the video share ways to help address the problem.

26. Show the video "Plastic Pollution, Our Oceans, Our Future ..." to the class (<https://www.youtube.com/watch?v=YGBpHYLNtRA>).  
*Teacher note: there are images of dead birds in the video at about 2:30 minutes that may be disturbing to some students. You might watch the video in advance and let students know what to expect.*
27. After the video, ask students:
  - What do you think about what you saw in the video? How did it make you feel? (*Answers will vary.*)
  - What were the similarities between Isatou's story in the book and the video? (*Answers may vary, but may include: pollution caused problems in the environment; pollution caused animals to get sick; someone helped the problem by cleaning up trash.*)
  - What types of trash were mentioned in the video as harmful? (*Answers may vary, but may include: fishing line, plastic foam, plastic bottles, netting, plastic ware, plastic packaging.*)
  - Why does plastic foam have such a negative impact on the ocean? (*Answers may vary, but may include: it is almost impossible to recycle or break down; it travels through the ocean food chain; fish eat the plastic foam and then people eat the fish; plastic foam absorbs chemicals that can get into the fish when eaten.*)
28. Share that you will now wrap up this lesson for today and continue on another day, where they will focus on the impact of trash more broadly and how we can become part of the pollution solution by being responsible consumers.

## DAY 1 CLOSURE:

29. Summarize what was covered today through the following questions:
  - What are the four types of trash? (*liquid, solid, hazardous and organic*)
  - As we heard in the story and in the video, what are the harmful effects of irresponsible consumption to our environment? (*Answers may vary, but may include: trash that isn't thrown away responsibly causes pollution; pollution can cause animals to get sick; people can get sick from eating sick animals.*)
  - What are the three "Rs" that can help us as consumers to lessen the trash problem and to become more responsible consumers? (*Reduce, reuse and recycle.*)
  - How did the main character from *One Plastic Bag* turn her trash problem into an income-earning opportunity? (*Isatou discovered a way to clean and reuse the old plastic bags and make them into purses that could be sold.*)
30. Explain that today we reviewed types of trash and examples of how trash can be harmful if we don't act responsibly as consumers. For the next class, we'll learn more about the impact of trash in the United States and develop ways to encourage responsible consumption in our community.
31. As time permits, play Jack Johnson's reduce, reuse, recycle song and encourage students to sing along. The song is online at [https://www.youtube.com/watch?v=USo\\_vH1Jz7E](https://www.youtube.com/watch?v=USo_vH1Jz7E).

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## DAY 2 PROCEDURE:

1. Play Jack Johnson's reduce, reuse, recycle song ([https://www.youtube.com/watch?v=USo\\_vH1Jz7E](https://www.youtube.com/watch?v=USo_vH1Jz7E)) and ask students to explain what it is about. (*Answers will vary, but may include: reducing, reusing and recycling; the three "Rs"; being responsible consumers when throwing away trash.*)
2. Remind students that they thought of two ways to reduce and recycle during Day 1 as part of Handout 1.
3. Ask students to share what they wrote with at least two other classmates and if their classmates had any ideas other than their own, to write them on the back of Handout 1.
4. Explain that the story and video from Day 1 focused on the effects of trash in specific places and how being more responsible can help.
5. Share that they now will use an infographic activity to examine how irresponsible consumption affects the United States.
6. Define **infographic** as a visual representation of information and data.
7. Distribute a copy of Handout 2 to each student.

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8. Divide students into small, collaborative groups and ask them to read the infographic and work together to answer the questions on their handout. Give groups about 10 minutes to complete the activity.
9. Review the answers to the activity as a class using the Handout 2 Answer Key.
10. Explain to students that after learning about infographics and how to review them, they now will have an opportunity to create their own infographic about being a responsible consumer.
11. Tell students that they'll continue to work together in collaborative groups for this activity.
12. Give each student a copy of Handout 3: How Can We Be More Responsible Consumers?
13. Ask each group to work together to respond to the questions on Handout 3.
14. Give students time to complete the handout (allowing for additional research outside of class if desired).
15. Tell students that they will use their completed handout to create an infographic that will be shared with the rest of the class.  
*Teacher's Note: Students should use materials/equipment for their infographic that you designate or deem appropriate based on what is available to them.*
16. Give each student a copy of Handout 4—Infographic Summary—and ask them to complete it during the other groups' presentations.
17. Invite each small group to present and explain its infographic to the rest of the class. *Teacher's Note: Infographics could be posted in the school cafeteria or hallways for other students to see/learn from when finished.*

## DAY 2 CLOSURE:

18. Ask students to share what responsible consumption means. *(Answers may vary, but may include: reducing, reusing and recycling; only using what we need; ensuring that we don't litter; cleaning trash up that others discard; etc.)*
  19. Ask students why it's important for us to be responsible consumers. *(Answers may vary, but may include: it helps our environment; it keeps trash out of our water; it helps keep food sources for animals clean; it decreases pollution; etc.)*
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## ASSESSMENT:

- Completed infographics, ensuring that they address each question within Handout 3.
  - Completed Handout 4 from each student as compared to the Handout 4 Rubric.
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## EXTENSION

- Read about Isatou Ceesay or watch a video and write about what you learned. <http://climateheroes.org/portfolio-item/isatou-ceesay-queen-plastic-recycling-gambia/>
  - View a video about the impact of pollution. <http://www.cnn.com/interactive/2016/12/world/midway-plastic-island/>
  - Review and conduct *One Plastic Bag* website activities, <http://oneplasticbag.com/teacher-resources/>
  - Research Earth Day, April 22, and find out how to get involved.
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## **VOLUNTARY NATIONAL CONTENT STANDARDS IN ECONOMICS**

Standard 2: Decision making—Effective decision making requires comparing the additional costs of alternatives with the additional benefits. Many choices involve doing a little more or a little less of something: few choices are “all or nothing” decisions.

Standard 3: Allocation—Different methods can be used to allocate goods and services. People acting individually or collectively must choose which methods to use to allocate different kinds of goods and services.

Standard 13: Income—Income for most people is determined by the market value of the productive resources they sell. What workers earn primarily depends on the market value of what they produce.

Standard 14: Entrepreneurship—Entrepreneurs take on the calculated risk of starting new businesses, either by embarking on new ventures similar to existing ones or by introducing new innovations. Entrepreneurial innovation is an important source of economic growth

## **NATIONAL STANDARDS FOR FINANCIAL LITERACY**

### **Standard I: Earning Income**

Income for most people is determined by the market value of their labor, paid as wages or salaries. People can increase their income and job opportunities by choosing to acquire more education, work experience and job skills. The decision to undertake an activity that increases income or job opportunities is affected by the expected benefits and costs of such an activity. Income also is obtained from other sources such as interest, rents, capital gains, dividends and profits.

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## VISUAL 1: THE TRUTH ABOUT TRASH

To be a responsible consumer, it's important we know some basic facts about trash or garbage. First, it's important to know that trash can be categorized in four ways.



LIQUID



SOLID



HAZARDOUS



ORGANIC

Some trash can be reused or recycled, such as plastic bottles, aluminum cans and food waste. Recycling is the process of collecting and processing materials that otherwise would be thrown away and turning them into new products (*source EPA*).

Trash that is not disposed of properly can pollute, or have a negative effect, on our resources such as water, soil and air. To help cut the amount of trash produced, we can do our part by reducing, reusing, recycling and being responsible consumers.

### The Three Rs



**REDUCE**—To use or create less of something



**REUSE**—To find another use for something



**RECYCLE**—To make something new out of something old

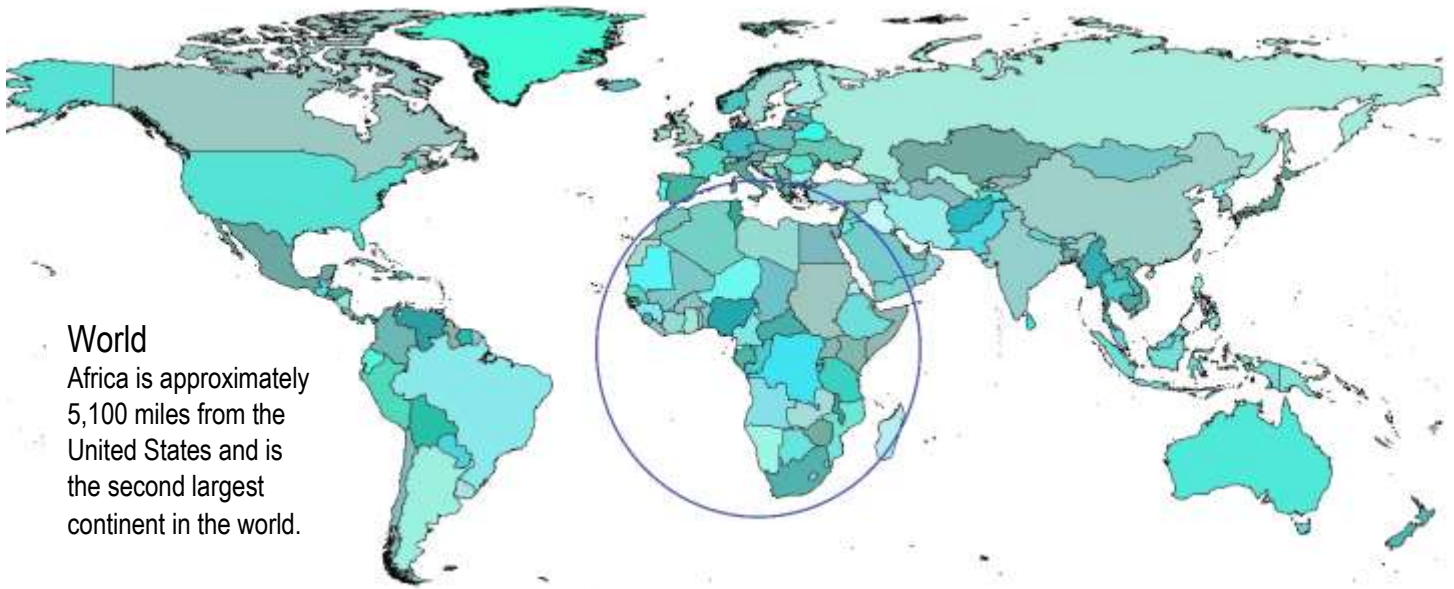


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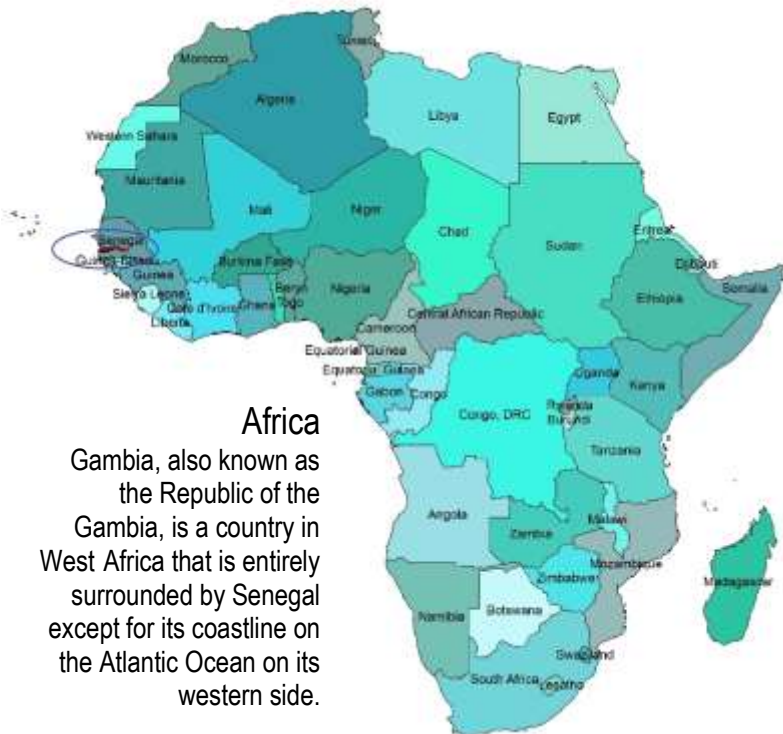
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## VISUAL 2: ONE PLASTIC BAG MAPS AND VOCABULARY



### World

Africa is approximately 5,100 miles from the United States and is the second largest continent in the world.



### Africa

Gambia, also known as the Republic of the Gambia, is a country in West Africa that is entirely surrounded by Senegal except for its coastline on the Atlantic Ocean on its western side.



### Gambia

Gambia is the smallest country in mainland Africa.

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## VISUAL 2: ONE PLASTIC BAG MAPS AND VOCABULARY

### VOCABULARY:

- **Mbuba** (mBOO-buh): a long dress
- **Wanjo** (WAHN-joe): a red drink made from hibiscus
- **Minties** (MIN-tees): hard candies
- **Omo** (OH-mo): soap
- **Dalasi (duh-LAH-see) coins**: Gambian money
- **Waaw** (WOW): yes
- **Jerejef** (jerr-uh-JEFF): thank you
- **Naka ligey be** (NAH-kuh lee-GAY bee): how is the work coming along?
- **Ndanka** (nDAHN-kuh): very slow



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## HANDOUT 1: REDUCE, REUSE OR RECYCLE

**Directions:** Match each picture with the correct term—**REDUCE, REUSE** or **RECYCLE**. Write the correct term under each picture.



Read the sentences below and identify which 'R' it describes—**REDUCE, REUSE** or **RECYCLE**.

David put his computer into energy saver mode when he was not using it. \_\_\_\_\_

Juanita donated shoes that she could no longer wear. \_\_\_\_\_

Explain two ways you can reduce or reuse in your school.

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## HANDOUT 1 ANSWER KEY

**Directions:** Match each picture with the correct term—**REDUCE**, **REUSE** or **RECYCLE**. Write the correct term under each picture.



**REDUCE**



**REUSE**



**REUSE**



**RECYCLE**



**REDUCE**

Read the sentences below and identify which 'R' it describes—**REDUCE**, **REUSE** or **RECYCLE**.

David put his computer into energy saver mode when he was not using it. \_\_\_\_\_ **REDUCE** \_\_\_\_\_

Juanita donated shoes that she could no longer wear. \_\_\_\_\_ **REUSE** \_\_\_\_\_

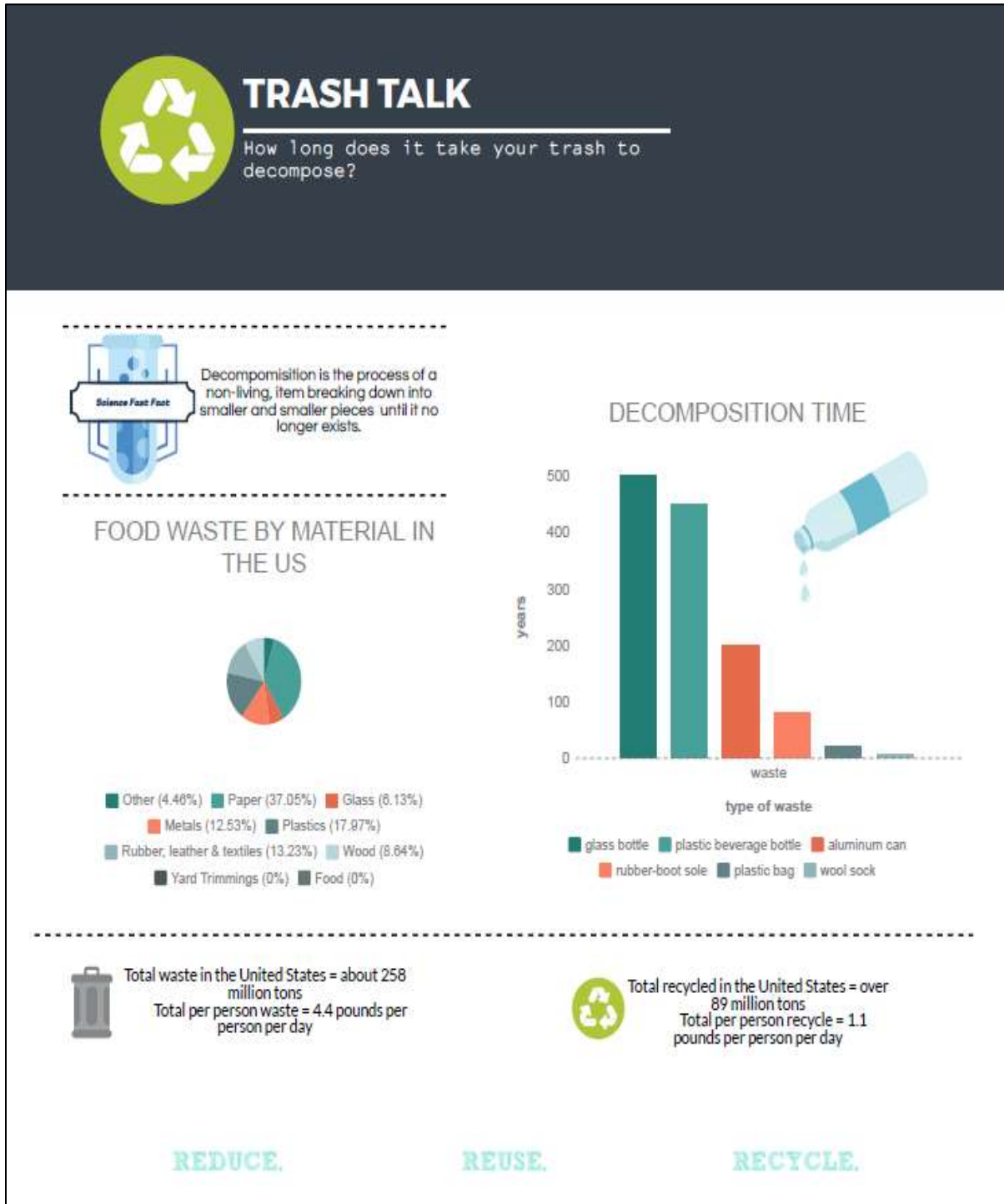
Explain two ways you can reduce or reuse in your school.

*Answers will vary*

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## HANDOUT 2: INFOGRAPHIC



Source: [www.epa.gov](http://www.epa.gov)

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## HANDOUT 2: INFOGRAPHIC QUESTIONS

1. What portion of the total waste per person in the United States is recycled?
2. Which three items make up the highest amount of trash in the United States?
3. Which two items have the fastest decomposition time?
4. What item on the infographic is most surprising to you and why?
5. Other than recycling, reusing and reducing, name two ways consumers can be more responsible with their trash.

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## HANDOUT 2 ANSWER KEY

6. What portion of the total waste per person in the United States is recycled?

***1.1 pounds out of 4.4 pounds =  $\frac{1}{4}$  or 25 percent***

7. Which three items make up the highest amount of trash in the United States?

***Paper, metals, plastics***

8. Which two items have the fastest decomposition time?

***Wool sock and plastic bag***

9. What item on the infographic is most surprising to you and why?

***Answers will vary***

10. Other than recycling, reusing and reducing, name two ways consumers can be more responsible with their trash.

***Answers will vary***

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## HANDOUT 3: HOW CAN WE BE MORE RESPONSIBLE CONSUMERS?

1. Identify a problem with trash disposal in our world.
2. What picture or image could help to illustrate this problem?
3. How does this problem affect our community or environment?
4. What picture or image could show the effect on the community or environment?
5. Explain three ways that you and others can help solve this problem.
6. What images or pictures could represent these solution ideas?
7. What title would you put on your infographic?
8. Are there other images, pictures or words that would help illustrate information in your infographic?

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## HANDOUT 4: INFOGRAPHIC SUMMARY

**Directions:** Write the problem each group identified in its infographic and write the answers to the questions at the bottom.

|                 |
|-----------------|
| <b>Group 1:</b> |
| <b>Group 2:</b> |
| <b>Group 3:</b> |
| <b>Group 4:</b> |
| <b>Group 5:</b> |
| <b>Group 6:</b> |
| <b>Group 7:</b> |

**How were the infographics developed by the class similar?**

**What are the benefits of responsible consumption?**

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## HANDOUT 4 RUBRIC

|                          | <b>Below Expectations</b>   | <b>Meets Expectations</b>   | <b>Exceeds Expectations</b>   |
|--------------------------|---|---|---|
| <b>Accuracy</b>          | Correctly identified less than half of the problems, similarities and solutions in the infographics       | Correctly identified more than half of the problems, similarities and solutions in the infographics         | Correctly identified all the problems, similarities and solutions in the infographics                             |
| <b>Completeness</b>      | Recognized less than half the problems, similarities and solutions in the infographics                    | Recognized more than half the problems, similarities and solutions in the infographics                      | Recognized all the problems, similarities and solutions in the infographics                                       |
| <b>Critical Thinking</b> | Demonstrated lack of understanding by not finding any similarities or benefits to responsible consumption | Demonstrated basic understanding by finding one or two similarities and benefits to responsible consumption | Demonstrated advanced understanding by finding three or more similarities and benefits to responsible consumption |