



TAKE CARE OF TEXAS: EDUCATOR MATERIALS

## LESSON PLAN

# How to Recycle

## Objectives

Students will understand how the recycling process works, what materials they can recycle at their school, and how to recycle properly. Students will also be able to recognize which products can be made from recycled materials.

## Prerequisites

- Verify your school's recycling program; specifically, what materials are accepted and what rules to follow when recycling (such as separating materials).
- If your school doesn't have a recycling program, download our Texas School Recycling Guide to help you get started.
- Verify which References to use for your class.
- Print any of the Infographics and Worksheets that you need.

## Duration

45 minutes

## Materials

How to Recycle Worksheet

## Introduction

Recycling is the process of taking old materials to make something new. This process relies on you, the consumer, to throw recyclables into a recycling bin.

Someone then picks up those bins and takes them to

a recycling facility, where the recyclables are sorted so that all the same materials are together. The sorted materials are then taken to manufacturers who process them into new products. The recycling process can be less energy-intensive than obtaining "raw" materials from natural resources. Therefore, recycling conserves natural resources and energy, creates jobs, and reduces materials sent to landfills.



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## Procedure:

1. Begin the lesson with a discussion. Ask students to explain what recycling is, what they think happens to the recyclables after they are thrown into a recycling bin, and why it's important to recycle.
2. Use the Introduction and the [SciGirls: Going Green](#) video to answer these questions and to show them how the recycling process works.
3. After the video, tell them that recycling programs sometimes accept different materials.
  - a. As an example, tell them what materials they can recycle at their school.
  - b. If desired, use the TCEQ Recycling Infographic as an example of the materials that are commonly accepted by local governments and waste haulers.
4. Inform them that recycling programs need their help, which they can give by following a few rules when recycling. For example, they should empty all liquids from plastic bottles before recycling them.
  - a. If your school has any recycling rules to follow (such as separating recyclable materials), inform your students of these rules.
  - b. If desired, use the TCEQ Recycling Infographic to show them some materials that are normally not accepted, along with common rules they should follow when recycling.
5. Divide the class into groups of 3-5 students and provide a Worksheet for each group.
6. Tell students they will work together to match the products in the word bank to the recycled material, and this will show them how many different products you can make from one recycled item.
7. When they have completed the Worksheet, randomly ask students to provide one of their answers along with an explanation for their choice.
8. If necessary, quiz them to make sure they understand how recycling works, what materials are recyclable at their school, what rules they need to follow when recycling, and why recycling is good for the environment.



**Optional:** As homework, ask them to find out what materials they can recycle at home, and if there are any rules they must follow when recycling. The next day, students should report what they found to the class.

## Glossary:

- **Waste** – any unwanted, discarded, or abandoned material or product that is no longer needed or used for its intended purpose.
- **Recycle** – the collection and processing of materials that would otherwise be thrown away as trash and turning them into new products.
- **Single-Stream Recycling** – the gathering of a variety of materials in one collection stream in a single container. It requires no separation at the point of collection.

## Applicable TEKS:

- **4<sup>th</sup> Grade** – §112.15.b. 1A,B; 2A,B; 5A,B.
- **5<sup>th</sup> Grade** – §112.16.b. 1A,B; 2A,B.
- **6<sup>th</sup> Grade** – §112.18.b. 1A,B; 2A,B.
- **7<sup>th</sup> Grade** – §112.19.b. 1A,B; 2A,B.

## References:

- Take Care of Texas – **Decoding Plastic Recycling Logos**. [takecareoftexas.org/sites/default/files/infographics/TCOT\\_DPRL%20Infographic2\\_1.jpg](http://takecareoftexas.org/sites/default/files/infographics/TCOT_DPRL%20Infographic2_1.jpg)
- Take Care of Texas – **You Can Recycle at School**. [takecareoftexas.org/hot-wire/you-can-recycle-school](http://takecareoftexas.org/hot-wire/you-can-recycle-school)
- Take Care of Texas – **Texas School Recycling Guide**. [takecareoftexas.org/sites/default/files/publications/gi-030.pdf](http://takecareoftexas.org/sites/default/files/publications/gi-030.pdf)
- PBS LearningMedia – **SciGirls Recycling Video**. [knct.pbslearningmedia.org/resource/16c35f7a-a428-43a0-8be1-364e6aebb313/going-green/](http://knct.pbslearningmedia.org/resource/16c35f7a-a428-43a0-8be1-364e6aebb313/going-green/)
- Texas Commission on Environmental Quality – **Recycling Infographic**. [www.tceq.texas.gov/assets/public/assistance/education/Recycling-Infographic.png](http://www.tceq.texas.gov/assets/public/assistance/education/Recycling-Infographic.png)

**Note:** Some of these references are from external sources and may not reflect the views of the TCEQ. Before using a reference, please verify that it is appropriate for your students.