Click® Teacher Guide: March 2019

NO MORE TRASH

This issue of *Click* will help children rethink their existing conceptions about garbage. Students will learn about the process of recycling and the benefits of repurposing our reusable trash. Furthermore, they will be amazed by the habits of creatures in our environment who naturally help to reduce waste.

CONVERSATION QUESTION

Where does our garbage go?

TEACHING OBJECTIVES

- Students will gain knowledge about the recycling process.
- Students will learn how to reduce the amount of waste in the world by creatively reusing discarded materials.
- Students will learn how nature's recyclers collect waste that would otherwise litter the earth.
- Students will demonstrate the ability to properly sequence a studied process.
- Students will construct explanations that reveal how specific trash can be turned into toys.
- Students will examine the functions of nature's recyclers.
- Students will follow the journey of milk from cow to jug.
- Students will create playthings from repurposed garbage.
- Students will use proper form to write a thank-you letter.



In addition to supplemental materials focused on core STEM skills, this flexible teaching tool offers vocabulary-building activities, questions for discussion, and crosscurricular activities.

SELECTIONS

- A Visit to the Recycling Center
- Expository Nonfiction, ~750L
- Trash or Toys Expository Nonfiction, ~650L
- Nature's Recyclers Expository Nonfiction, ~650L

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A Visit to the Recycling

Center

pp. 10–14, Expository Nonfiction

Young readers will take a fascinating journey through one of Rumpke's recycling centers and study the process of collecting, sorting, compacting, and repurposing our garbage. Clear, bright photographs accompany this expository text.



RESOURCES

Milk Jug Journey

OBJECTIVES

- Students will gain knowledge about the recycling process.
- Students will demonstrate the ability to properly sequence a studied process.
- Students will follow the journey of milk from cow to jug.

KEY VOCABULARY

- bale (p. 13) a bundle (of plastic) that is tightly wrapped and bound with cords
- conveyor belt (p. 11) a continuous band of rubber used for moving objects from one place to another
- front loader (p. 11) a wheeled vehicle with a scoop in the front for digging and loading loose material
- *magnet* (p. 13) a metal object that attracts iron and steel

ENGAGE

Conversation Question: Where does our garbage go?

Create a word web on the board and post the conversation question from this issue ("Where does our garbage go?") in the center. List student responses and add further details after reading and completing the READ & DISCUSS questions.

INTRODUCE VOCABULARY

Have students locate the sentences in the article that contain the key vocabulary terms. Elicit meanings from the students, then post the given definitions on the board. Instruct the students to create illustrations (nonlinguistic) depicting the meanings of the words.

READ & DISCUSS

Reinforce the steps of the recycling process presented in this article by posing the following questions for discussion.

- What is the purpose of a recycling center?
- What is the job of the workers who keep watch over the conveyor belt?
- How do magnets help sort the recyclables?
- Why is all the plastic squished together to form bales?

CONCEPT/SKILL FOCUS: Sequence and Process

INSTRUCT: Review the article on pages 10–14. Elicit from students that there is a specific process that recyclables undergo in order to be turned into something else. Distribute the *Milk Jug Journey* graphic organizer and instruct students to refer back to the text and to properly sequence each step. Their finished work will summarize the systematic repurposing of recycled plastic. (You can do this activity orally with very young students.)

ASSESS: Circulate as students are working on the graphic organizer and discuss the information in the article. Direct students having difficulty with the sequencing process to reread the text with a partner. Collect the organizer when completed to further evaluate understanding of this skill.

EXTEND

Science This article details the process of an empty milk container as it travels through a recycling plant. Have children take a further step back and explore the journey of milk from cow to jug. Use books and videos to explain this process. Challenge students to list/draw as many dairy products as they can.

Milk Jug Journey

Use information from the article, "A Visit to the Recycling Center," to put the steps of the recycling process listed below in the correct order.

Step Number	Step Explanation
	Front loaders scoop up recyclables and everything is poured onto conveyor belts.
	The jugs land in a bunker and are pressed into a bale.
1	You finish the milk and put the jug into your recycling bin.
	The conveyor belt dumps the jug into a sorter.
	Companies buy the bales of plastic and make them into something new.
	At the recycling center, the collection truck dumps everything onto the tipping floor.
	Cardboard, paper, and cans are sorted out.

On the back of this paper, illustrate one of the steps listed above.

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Trash or Toys

pp. 18–21, Expository Nonfiction

Students will learn that reusing things is even better for the planet than recycling. Sorted trash, basic art supplies, and creative thinking are all that is needed to discover a whole new world of playthings.



RESOURCES

Reused and Amused

OBJECTIVES

- Students will learn how to reduce the amount of waste in the world by creatively reusing discarded materials.
- Students will construct explanations that reveal how specific trash can be turned into toys.
- Students will create playthings from repurposed garbage.

KEY VOCABULARY

- *fabric* (p. 19) cloth made by weaving
- *scrap* (p. 19) a small, left-over piece of something
- tube (p. 20) a long, hollow cylinder

ENGAGE

Conversation Question: Where does our garbage go?

Create interest in the topic by setting up ten plastic soda bottles as bowling pins for use during the class's recess or free play time. Allow the children to interact with the materials, and to take turns bowling. This prereading activity will motivate the students to learn other exciting ways to repurpose their recyclables.

INTRODUCE VOCABULARY

Post the three key vocabulary terms on the board and guide students to notice that they are all nouns, and in this case, "things." Display the title of the article and ask how they think the words will apply to the text. Draw attention to these words as they appear in the article and post definitions on the board alongside the term.

READ & DISCUSS

Have small groups of students discuss the questions below. Reconvene and share responses.

- How much trash do Americans throw away every day?
- How can reusing things lower the amount of waste and pollution?
- What are some of the ways that reusing your trash can be "fun"?
- Why can making your own toy be more exciting than buying one?

CONCEPT/SKILL FOCUS: Construct Explanations

INSTRUCT: Review the information presented in the article. Distribute the graphic organizer, *Reused and Amused*, and instruct students to reexamine the text to further understand how garbage items were turned into exciting toys. Allow students to work with a partner to record information on their charts. They may write and/or draw their responses depending on ability.

ASSESS: Circulate and discuss the information that the students are recording on their organizers. Collect the finished work and remediate if necessary.

EXTEND

Art Return the completed graphic organizers to the students and have children share their answers aloud. Focus on the list of materials that the children wrote/drew on the back of the paper. Have the children discern what materials are already in the classroom (paper, paint, markers, yarn, scissors) and what items can be brought from home. Allot a week for students to bring in recyclables from home. Use the ideas from the article, other resources, or the students' ideas and assign the class the project of turning trash into toys.

Constructing Explanations

Reused and Amused

Refer to the article to learn how trash can become toys.

How can
a can become a piggy bank?
a milk jug become a toss/catch game?
a caraal hay bacama a magazina baldar?
a cereal box become a magazine holder?
a nanar tuba and agg cartan bacama a train?
a paper tube and egg carton become a train?

On the back of the paper, list the materials that would be needed to make these toys.

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Nature's Recyclers pp. 24–26, Expository Nonfiction

Students will learn that nature has an amazing recycling system that helps to keep our planet clean. This article examines several creatures that break down organic material and aid in minimizing litter and disease.



RESOURCES

Nature's Clean-Up Crew

OBJECTIVES

- Students will learn how nature's recyclers collect waste that would otherwise litter the earth.
- Students will examine the functions of nature's recyclers.
- Students will use proper form to write a thank-you letter.

KEY VOCABULARY

- *fertilizer* (p. 25) a substance added to soil to help the growth of plants; plant food
- litter (p. 24) garbage, trash
- *rotting* (p. 25) becoming weak and breaking down, decaying

ENGAGE

Conversation Question: Where does our garbage go?

Engage in a brainstorming activity with the children that focuses on the different ways we clean up. How do we clean up our classroom? Our homes? Our yard? Have the children consider how animals in nature might clean up our environment. Read the article aloud.

INTRODUCE VOCABULARY

Review the key terms and definitions with the class. Guide students to notice that each word belongs in a different part of the alphabet. (Beginning: A–I, Middle: J–Q, End: R–Z) Have them write these headings at the top of their paper and put each word in the correct category. As a post-reading activity, have students add other words from the article to their list in the correct columns.

READ & DISCUSS

Read aloud the following questions prior to reading the text. Advise students to note where in the article those answers are found. Discuss responses to the questions as a post-reading activity.

- Who cleans up the leaves that fall on the forest floor?
- How do turkey vultures help keep diseases from spreading?
- Why do you find earthworms in "good" soil?
- Why can't you see bacteria without a microscope?

CONCEPT/SKILL FOCUS: Structure and Function

INSTRUCT: Distribute the graphic organizer, *Nature's Clean-Up Crew*, and tell the students that they are going to record the functions of each natural recycler using information from the text. Direct the class to reread the article with a partner and to highlight relevant information before they begin working on their chart.

ASSESS: Examine the information listed on the students' organizers. Evaluate the accuracy of their statements. If errors are noted, guide students to return to the text to make corrections.

EXTEND

Language Arts Have students choose one of nature's recyclers and write a simple thank-you card expressing their appreciation to this creature for helping to keep our world clean. These cards may be humorous and can contain drawings to enhance the words, but emphasize with the class that they need to include accurate scientific information that was revealed in the article.

Function

Nature's Clean-Up Crew

Refer to the article, "Nature's Recyclers," to study the function of the natural recyclers listed below.

Nature's Recycler	Function (How does it recycle naturally?)
Turkey vulture	
Earthworm	
Dung beetle	
Mushrooms	
Bacteria	