



# Knowledge 11

Teacher Guide

Kindergarten

## Taking Care of the Earth

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Knowledge 11

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# **Taking Care of the Earth**

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## **Teacher Guide**

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# Introduction

This introduction includes the necessary background information to be used in teaching the *Taking Care of the Earth* domain. The Teacher Guide for *Taking Care of the Earth* contains ten daily lessons, each of which is composed of two distinct parts, so that the lesson may be divided into smaller chunks of time and presented at different intervals during the day. Each entire lesson will require a total of sixty minutes.

This domain includes a Pausing Point following Lesson 6. At the end of the domain, a Domain Review, a Domain Assessment, and Culminating Activities are included to allow time to review, reinforce, assess, and remediate content knowledge. You should spend no more than sixteen days total on this domain.

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## DOMAIN COMPONENTS

Along with this Teacher Guide, you will need:

- Flip Book for *Taking Care of the Earth*, which can also be found on the CKLA Florida Teacher Resource site
- Image Cards for *Taking Care of the Earth*
- Activity Book
- Digital Components for *Taking Care of the Earth*

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## ADDITIONAL RESOURCES FOR THIS DOMAIN



### Equity Guides

The Amplify CKLA Equity Guide offers an overview of the many ways that the Amplify CKLA program supports students' understanding of issues related to diversity, equity, inclusion, and social justice. The guide for each grade details how each domain of the Knowledge Strand (Grades K–2) or each unit (Grades 3–5) aligns to outcomes identified in the Teaching Tolerance Social Justice Standards. This tool enables teachers to understand how students work toward these outcomes through the Amplify CKLA program.

The guide also includes a DEI question for each domain or unit that teachers may use to further develop students' understanding of how the content area connects to these issues. The Equity Guide is located on the CKLA Florida Teacher Resource site.





## Knowledge Builders

Knowledge Builders are animated videos designed to further student engagement and build students' background knowledge on Amplify CKLA topics. Each video has an accompanying guide that includes suggestions for follow-up extension activities. Knowledge Builders can be used as an introduction to the Knowledge unit or throughout the domain during Pausing Points, Culminating Activities, or Domain Reviews. The videos are located on the CKLA Florida Teacher Resource site.



## ReadWorks Articles

Amplify CKLA and ReadWorks have partnered to deliver high-quality texts aligned to both the Amplify CKLA Knowledge Sequence and the Florida content topics in Social Studies, Science, and the Arts. These texts are accompanied by vocabulary supports and formative assessment opportunities aligned to the Florida B.E.S.T. standards. Teachers may monitor student progress using the ReadWorks reporting features.

These articles are designed for flexible use, including independently, in small groups, or in whole group instruction as desired. The ReadWorks icon appears in the sidebar of each lesson that has an accompanying ReadWorks article. To access all Amplify CKLA-aligned ReadWorks articles, see <https://about.readworks.org/CKLA-FL.html>.



## Trade Book Guides

Each Knowledge Domain includes a high-quality, authentic text selected specifically to enhance the content of the domain. The book is intended for use as an introduction to the domain before diving into the deeper content of the domain Read-Alouds. The Trade Book Guide, found on the CKLA Florida Teacher Resource site, provides a summary of the book, text complexity information, an essential question, key vocabulary words, and activities to do after the Read-Aloud, including writing prompts. The book and Trade Book Guide activities can be used during Core Connections lessons as well as other points in the domain, such as Pausing Points and Culminating Activities.

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## RECOMMENDED RESOURCES

*Core Knowledge Kindergarten Teacher Handbook*, edited by E.D. Hirsch, Jr. and Souzanne A. Wright (Core Knowledge Foundation, 2004) ISBN: 978-1890517694

You should consider various times throughout the day when you might infuse the curriculum with authentic domain-related literature. If you are able to do so, you may recommend students select books from the Recommended Resources list. In addition, if you recommend that families read aloud with their child each night, you may wish to suggest that they choose titles from this list to reinforce the concepts covered in this unit.

You might also consider creating a classroom lending library, allowing students to borrow domain-related books to read at home with their families. The Recommended Resources list, which also includes online resources, can be found online on the CKLA Florida Teacher Resource site.

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## WHY TAKING CARE OF THE EARTH IS IMPORTANT

This domain will introduce students to the importance of being environmentally aware individuals. Students will learn that the best way to conserve Earth's natural resources is to practice the three Rs of conservation—reduce, reuse, and recycle. By studying conservation, students will become familiar with the earth's natural resources and will begin to recognize how people's actions affect the environment in which we live. Students will learn specifically about land, water, and air pollution as well as the water cycle, the journey of trash from its creation to its burial in a landfill, and the steps in the recycling and composting processes. Practical examples of how students can help take care of the earth are included in every lesson.

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## CORE VOCABULARY FOR TAKING CARE OF THE EARTH

The following list contains all of the core vocabulary words in *Taking Care of the Earth* in the forms in which they appear in the read-alouds or, in some instances, in the “Introducing the Read-Aloud” section at the beginning of the lesson. Boldfaced words in the list have an associated Word Work activity. The inclusion of the words on this list does not mean that students are immediately expected to be able to use all of these words on their own. However, through repeated exposure throughout the lessons, they should acquire a good understanding of most of these words and begin to use some of them in conversation.

<b>Lesson 1</b> Earth <b>responsibility</b> surface	<b>Lesson 5</b> aluminum furnace <b>solution</b> sorted	<b>Lesson 9</b> evaporate pollutants reservoirs <b>supply</b>
<b>Lesson 2</b> decompose dumpster <b>hazardous</b> landfill	<b>Lesson 6</b> <b>compost</b> leftovers nutrients process	<b>Lesson 10</b> carpool <b>effort</b> organize
<b>Lesson 3</b> <b>conserve</b> decayed	<b>Lesson 7</b> litter pollution smog <b>toxic</b>	
<b>Lesson 4</b> generate products recycle <b>reduce</b> reuse	<b>Lesson 8</b> appliance exhaust <b>global</b>	

## CORE CONTENT OBJECTIVES FOR TAKING CARE OF THE EARTH

Students will:

- Identify Earth and explain why people have a special responsibility to take care of the earth
- Explain what happens to garbage from its creation to being dumped in the landfill
- Identify Earth's natural resources (land, water, and air) and explain their importance
- Identify and describe the meaning of *reduce*, *reuse*, *recycle*
- Explain the process of recycling materials
- Identify common recyclable materials
- Identify and describe the process of composting
- Identify different types of pollution and their causes
- Describe air pollution and why it is harmful

- Identify basic types of water and describe the water cycle
- Identify possible solutions for the problems of garbage, litter, pollution, and conserving natural resources

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## **WRITING**

In this domain, students will focus on written communication through drawing detailed pictures and writing short phrases or sentences. With assistance from the teacher as scribe, students will complete a Know-Wonder-Learn Chart about taking care of the earth. Students will also demonstrate an understanding of the information they learned from the read-aloud text by drawing pictures and discussing them with the class. Students will also participate in a class book, which includes ideas for solutions to problems regarding taking care of the earth.

The following activities may be added to students' writing portfolios to showcase student writing within and across domains:

- Know-Wonder-Learn Chart (Lessons 1, 6, 7)
- Drawing the Read-Aloud (Lessons 5, 8, 9)
- Class Book (Lesson 10)
- any additional writing completed during the Pausing Point, Domain Review, or Culminating Activities

## 1

## TAKING CARE OF THE EARTH

# Introducing the Earth

**PRIMARY FOCUS OF LESSON****Speaking and Listening**

Students will discuss Earth and how we interact with it and will discuss ways that they can monitor their comprehension of text they read.

ELA.K12.EE.4.1

**Reading**

After experiencing a read-aloud with a first-person narrator, students will identify what the earth is made of and why it is important for people to take care of it.

ELA.K12.EE.1.1; ELA.K12.EE.3.1; ELA.K12.EE.4.1

**Language**

Students will demonstrate an understanding of the Tier 2 word *responsibility*.

ELA.K.V.1.2

Students will demonstrate an understanding of the multiple meaning word *earth*.

ELA.K.V.1.1

**Reading**

Students will monitor their comprehension of the text and identify facts about Earth.

ELA.K12.EE.5.1

**FORMATIVE ASSESSMENT****Exit Pass**

**Written** Students will identify the three things that make up the earth.

ELA.K12.EE.5.1

## LESSON AT A GLANCE

	Grouping	Time	Materials
<b>Introducing the Read-Aloud</b>			
Domain Introduction	Whole Group	10 min	<input type="checkbox"/> globe <input type="checkbox"/> Know-Wonder-Learn Chart
Core Connections			
<b>Read-Aloud</b>			
Purpose for Listening	Whole Group	30 min	
"Introducing the Earth"			
Comprehension Questions			
Word Work: <i>Responsibility</i>			
<b>This is a good opportunity to take a break.</b>			
<b>Application</b>			
Multiple Meaning Word Activity	Whole Group	20 min	<input type="checkbox"/> Poster 1M: Earth <input type="checkbox"/> Know-Wonder-Learn Chart <input type="checkbox"/> index cards
Know-Wonder-Learn Chart			
<b>Take-Home Material</b>			
Family Letter			<input type="checkbox"/> Activity Page 1.1

## ADVANCE PREPARATION

### Introducing the Read-Aloud

- Create a Know-Wonder-Learn Chart on the board/chart paper. Alternatively, you may access a digital version in the Digital Components for this domain.
  - Make sure to leave room on the chart to add more information in future lessons.
  - Display the chart for use in future lessons.

## Universal Access

- You may wish to create an Earth Hat (see Flip Book for materials and instructions) to wear during read-alouds. This will signal to students that “Good Old Earth” (the first-person narrator of this domain) is speaking to them.

## CORE VOCABULARY

**Earth, n.** the planet that we live on; the world

Example: The planet Earth is made up of land, water, and air.

Variation(s): none

**responsibility, n.** something that a person is expected to do

Example: Making my bed is my responsibility.

Variation(s): responsibilities

**surface, n.** the outer layer of something

Example: The surface of a marble is smooth.

Variation(s): surfaces

### Vocabulary Chart for “Introducing the Earth”

Type	Tier 3 Domain-Specific Words	Tier 2 General Academic Words	Tier 1 Everyday Speech Words
Vocabulary		responsibility ( <i>responsabilidad</i> ) surface ( <i>superficie</i> )	
Multiple Meaning			Earth
Sayings and Phrases	Good Old Earth outer space take care of		

## Lesson 1: Introducing the Earth

# Introducing the Read-Aloud



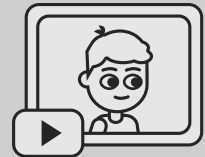
**Speaking and Listening:** Students will discuss Earth and how we interact with it and will discuss ways that they can monitor their comprehension of text they read.

ELA.K12.EE.4.1

## DOMAIN INTRODUCTION (5 MIN)

- Tell students that all the people in all the towns and cities they have ever heard about live on the same planet.
- Ask students if they can name the planet on which they live.
- Show students a globe, and tell them that the globe represents Earth.
- Explain that all the people, animals, trees, and flowers live together on planet Earth.
- Tell students that over the next couple of weeks they will be learning more about Earth and how to take care of our planet.
- Explain to students that because we all live on Earth together, we need to care for the earth. We need to keep our planet clean and healthy, just as we would keep ourselves clean and healthy.
- Ask students what can happen if you play in a mud puddle. (*You get dirty and have to clean up.*)
- Explain to them that it is the same with the earth. If Earth becomes dirty, or polluted, it will be harder for plants, animals, and people to live here. We have to find a way to clean up the pollution.
- Tell students that the narrator of the read-alouds in this domain is planet Earth.
- Ask students if they think planet Earth can talk.
- Tell students that for the next couple of weeks, you'll be asking them to use their imaginations and pretend that the earth is actually able to talk. In other words, they should pretend that the earth is reading to them, even though that could not happen in real life.

## Knowledge Builders



## Trade Book Guides





## CORE CONNECTIONS (5 MIN)

- Refer to the Know-Wonder-Learn (KWL) Chart you prepared in advance.



### Check for Understanding

**One-Word Answer:** What is the name of the planet we live on?  
(*Earth*)

ENGLISH  
LANGUAGE  
LEARNERS



### Speaking and Listening

Exchanging Information  
and Ideas

#### Entering/Emerging

Ask students yes/no questions about Earth and encourage them to ask their own questions about Earth.

#### Transitioning/Expanding

Encourage students to build on what the previous student has said about Earth.

#### Bridging

Challenge students to say something more about what the previous student has said about Earth.

- Ask students what they already know about Earth and how to take care of the planet.
- Prior to recording students' responses, point out that you are going to write down what they say, but that they are not expected to read what you write because they are still learning the rules for decoding words.
  - Emphasize that you are writing what they say so that you don't forget, and tell them that you will read the chart to them.
- As students respond, repeat and expand upon each response using richer and more complex language, including, if possible, any domain vocabulary.
- Record students' responses under the 'K' of the KWL Chart (What I Know).
  - If a student's response includes inaccurate factual information, record it nonetheless and acknowledge the response by saying something like, "So you think that there's nothing we can do to help the planet? We'll have to listen very carefully to our read-aloud and find out if that's true!"
- Ask students what they wonder about, or what they want to know about, planet Earth and how to take care of it.
  - You may need to prompt students by asking questions about what they think a healthy planet looks like, what littering does to the earth, etc.
- Record these responses under the 'W' on the KWL Chart (What I Wonder or Want to Know). Tell students that thinking about what they already know about a topic and what new things they want to know helps them understand the text better when they read.
- Tell students that after they have listened to some of the read-alouds in this domain, they will have a chance to share what they have learned. These answers will be listed in the 'L' (What I Have Learned) portion of the chart.

- Ask students to keep the list of ‘W’ questions in mind as they listen to the upcoming read-alouds to see if they can find some of the answers as the read-alouds are shared. Remind students that whether they are reading on their own or listening to someone read to them, they should be aware of parts of the text that they don’t understand. If they are reading on their own, they can go back and reread, ask for help, or ask questions about the meaning. When they are listening, they can ask questions to help them better understand.

## Lesson 1: Introducing the Earth

# Read-Aloud



**Reading:** After experiencing a read-aloud with a first-person narrator, students will identify what the earth is made of and why it is important for people to take care of it.

ELA.K12.EE.1.1; ELA.K12.EE.3.1; ELA.K12.EE.4.1

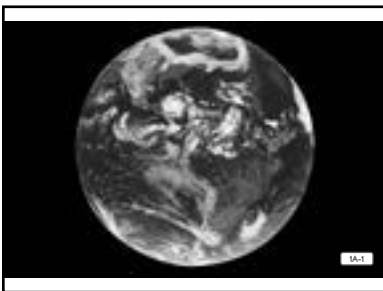
**Language:** Students will demonstrate an understanding of the Tier 2 word *responsibility*.

ELA.K.V.1.2

### PURPOSE FOR LISTENING

- Tell students to listen to the read-aloud to find out what the earth is made of.
- Remind students that the story is told by Earth itself.
- Ask them to try to remember the three substances, or things, that make up the earth and why they are important to people.

### “INTRODUCING THE EARTH” (15 MIN)



#### Show image 1A-1: Earth from outer space

*Describe what you see in the picture.*

Hi, kids. It’s me, **Earth**. Some people call me the world, some call me the planet, and some even call me Mother Earth. But you can just call me Good Old Earth. *Earth is the planet on which we live. Earth also means the ground.*

This is what I look like from outer space, from somewhere beyond our friend the moon. *Outer space is the area beyond*

ReadWorks Articles

“Who Is a Good Citizen at School?”

R

*Earth. The moon, stars, and sun are all objects in outer space.* From outer space, I guess I look pretty small. You can see that I am mostly blue. That's because I'm mostly covered with water. But you can also see lots of green and brown. Those are the colors of the land where people live. Of course, I am also covered by a nice blanket of air. You can't see the air, but you can see the white clouds that float around in it.

I've been here a long time, and I've seen many things. I just want to tell you that I am truly amazed by you people, and I'm glad you're here with me. You do so many amazing things.



**Show image 1A-2: A waterfront town**

I like your farms and your nice little towns. I like the great big cities you've built. They're incredible! I don't even mind the roads you've built all over me. I like to feel your boats floating on my oceans, seas, and lakes, and your airplanes kind of tickle a little as they zoom through my skies.



**Show image 1A-3: Happy kids**

Most of all, I like you kids. I like to feel your little feet running around, I like to hear you laughing, and I especially hope that you enjoy and appreciate all the beautiful and amazing places on my **surface**. *The surface of the earth is its outer layer of land, or the ground.* Let's take a look at some of these places together.



**Show image 1A-4: Forest, water, and mountains**

People live on land, but you are not the only living things that depend on, or need, the land. Animals, plants, and people all need to share the land with each other.

The flowers and grasses add such beauty to my surface. Of course, the flowers, trees, and grasses aren't there just to be pretty. They're important for all the creatures that live here: from the squirrels and birds that live in the trees, to the bees that buzz around drinking nectar from the flowers, to the animals that eat the grass.



### Show image 1A-5: River

It's the same with rivers and other bodies of water, such as lakes and streams. They're nice to look at, and nice to swim around in or paddle down in your canoe. But they're also home to many creatures, from fish, to snakes and turtles, to snails. And their waters are important in many ways for you people, too.



### Show image 1A-6: Blue sky

Here is a photo of the beautiful sky. On this day, the sun is shining brightly, and a few puffy white clouds are floating through the air. Every time you look up in the sky from now on, I want you to think of the air that's there. You'll want to listen very carefully when I tell you about keeping the air and skies clean. After all, the

air is what you breathe every few seconds, every single day. *Inhale and exhale deeply. You are breathing air in and out, even though you can't see the air.*



### Show image 1A-7: Child

People are the most intelligent creatures here on Earth. You're the ones who built big cities and invented cars and computers. You make medicines for people and animals, and you have schools and airplanes and many other important things.

You people are truly amazing. You can do many, many things that no other living creature here on Earth can do. That gives you extra **responsibility**: because you're the smartest, all living things depend on you to take care of me. *So it's your job; you're expected to take care of the earth.* You have to share the earth; you're in it together.

## Support

*Creatures* means living things, like animals and people.

## Challenge

Can you think of ways that water is important to people? How do people use water?



### Show image 1A-8: Sunrise

I want people to truly enjoy living here. Every morning when you wake up and see the sunrise, I hope you will say, "Great! It's the start of another wonderful day on beautiful Earth!" To make sure that happens, I need to teach you about something I like to call "Taking Care of the Earth." I really need your help

making sure that the air, water, and land stay clean so that you, and all other things living here, can be safe, healthy, and happy. And you kids can really do a lot to help out (and to make sure that all the grown-ups do their part, too). So I hope you'll listen carefully over the next couple of weeks, because I have a lot of important things to share with you.

## Support

If students have difficulty responding to questions, reread pertinent lines of the read-aloud and/or refer to specific images.

ENGLISH  
LANGUAGE  
LEARNERS



## Reading

Offering Opinions

### Entering/Emerging

Provide students sentence frames using a small set of learned phrases (e.g., "The read-aloud is \_\_\_\_").

### Transitioning/Expanding

Provide students sentence frames using an expanded set of learned phrases (e.g., "I think the read-aloud is because . . .").

### Bridging

Provide minimal support and guidance for open responses.



## Check for Understanding

**Recall:** What are some other names for Earth? (*Answers may vary, but may include the world, the planet, or Mother Earth.*)

## COMPREHENSION QUESTIONS (10 MIN)

- Inferential** What three things make up the earth? (*Land, water, and air are the three things that make up the earth.*)
- Inferential** Give examples of where you find water on the earth. (*Answers may vary, but may include oceans, lakes, ponds, rivers, and streams.*)
- Inferential** Why are land, water, and air important to people? (*People need land to live on, water to drink, and air to breathe.*)
- Literal** Why did the author say that people have a special responsibility to take care of the earth? (*We are the smartest creatures on Earth, and other living things depend on us.*)
- Evaluative** *Think Pair Share:* Do you think that everything that happens in this read-aloud could really happen, or is it all pretend, or fantasy? Or, is some of it real and some of it pretend? How do you know? (*Part of the read-aloud is fantasy because the earth cannot talk or feel things. What the earth is describing, however—how we depend on Earth's land, water, and air to survive—is real.*)

## WORD WORK: RESPONSIBILITY (5 MIN)

1. In the read-aloud you heard, “That gives you extra responsibility: because you’re the smartest, all living things depend on you to take care of [the earth].”
2. Say the word *responsibility* with me.
3. A responsibility is something that a person is expected to do.
4. Parents have a responsibility to care for their children, or a person may have a responsibility to do the dishes after dinner.
5. Tell about a responsibility you have. Try to use the word *responsibility* when you tell about it. [Ask two or three students. If necessary, guide and/or rephrase students’ responses: “I have a responsibility to . . .”]
6. What’s the word we’ve been talking about?

**Use a Making Choices activity for follow-up.** If any of the things I say is a responsibility of yours, say, “That is my responsibility.” If any of the things I say is not a responsibility of yours, say, “That is not my responsibility.”  
(Answers may vary for all.)

- setting the table
- picking up your toys
- driving yourself to school
- making your dinner
- washing your laundry, or dirty clothes
- taking care of a pet
- brushing your teeth
- making your bed

## Lesson 1: Introducing the Earth

# Application



**Language:** Students will demonstrate an understanding of the multiple meaning word *earth*.

**ELA.K.V.1.1**

**Reading:** Students will monitor their comprehension of the text and identify facts about Earth.

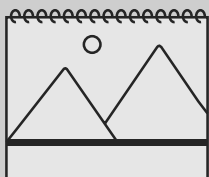
**ELA.K12.EE.5.1**

### MULTIPLE MEANING WORD ACTIVITY (5 MIN)

#### Show Poster 1M: Earth

- Remind students that in the read-aloud they heard, “People are the most intelligent creatures here on Earth.”
- Explain that here, *Earth* means the planet on which we live.
- Have students hold up one or two fingers to indicate which image on the poster shows this meaning.
- With a partner, have students talk about what they think of when they see this picture of Earth.
- Call on a few students to share their responses.
  - Remind students to try to answer in complete sentences (e.g., “When I see Earth, I think of the world, the planet, Mother Earth, etc.”).
- Explain that *earth* also means something else. Explain that *earth* means the ground, which is made up of rock, sand, and soil.
- Have students hold up one or two fingers to indicate which image on the poster shows this meaning.
- With a partner, have students talk about what they think of when they see this kind of earth.
- Call on a few students to share their responses.
- Remind students to try to answer in complete sentences (e.g., “This picture of earth makes me think of the ground, digging in the dirt, planting seeds or growing plants in the soil, etc.”).

#### Flip Book Poster 1M



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#### Reading

##### Analyzing Language

##### Entering/Emerging

Ask questions that students can answer by pointing to the correct image on Poster 1M (e.g., “Which image shows the planet that we live on?”).

##### Transitioning/Expanding

Ask students to provide examples of items related to each meaning of *earth* (e.g., “What are the things that make up Earth?”).

##### Bridging

Have students use each meaning correctly in context.

## KNOW-WONDER-LEARN CHART (15 MIN)

- Review the 'K' and 'W' columns of the KWL Chart created earlier. Discuss how talking about what they already know and thinking of "I wonder" questions helped them understand the text as they listened to you read.
- Ask students what they learned in the read-aloud, and record their responses in the 'L' column.
- Prior to recording students' responses, point out that you are going to write down what they say, but that they are not expected to be able to read what you write because they are still learning all the rules for decoding.
  - Emphasize that you are writing what they say so that you don't forget, and tell them that you will read the chart to them.
- As students respond, refer back to both the 'K' and 'W' columns of the chart to see if, and how, what they have learned relates to what was written in either the 'K' or 'W' column.
- In the event that something newly learned in the 'L' column contradicts something that was recorded earlier in the 'K' column, this should be discussed.
  - For example, "Earlier today, when we were talking about what we knew, we said that there wasn't anything we can do to help the planet. What do you think now?"
  - Then, cross out the inaccurate information in the 'K' column.



### Exit Pass

On an index card, have students identify the three things that make up the earth by writing, drawing, or dictating.

End of Lesson

# Take-Home Material

## FAMILY LETTER

- Send home Activity Page 1.1.

## Support

Reread small sections of the text aloud, as necessary, to help students check the accuracy of their responses.

## Activity Page 1.1





## 2

## TAKING CARE OF THE EARTH

## Garbage

## PRIMARY FOCUS OF LESSON

**Speaking and Listening**

Students will recall information about Earth and will recognize that they can gain information from illustrations in informational texts.

ELA.K.R.2.1; ELA.K12.EE.4.1

**Reading**

Students will describe a landfill and discuss its purpose.

ELA.K.R.2.2; ELA.K12.EE.3.1; ELA.K12.EE.4.1

**Language**

Students will demonstrate an understanding of the Tier 2 word *hazardous*.

ELA.K.V.1.1

**Writing**

Students will use temporal vocabulary to describe the steps of what happens to garbage after it is thrown away, and then they will write about, illustrate, and share their descriptions.

ELA.K.C.1.4; ELA.K.V.1.1

## FORMATIVE ASSESSMENT

**Writing Activity**

**Sequencing Events** Students will write and draw a picture, describing an event within the “life cycle” of garbage.

ELA.K.C.1.4

## LESSON AT A GLANCE

	Grouping	Time	Materials
<b>Introducing the Read-Aloud</b>			
What Have We Already Learned?	Whole Group	10 min	
Making Predictions About the Read-Aloud			
<b>Read-Aloud</b>			
Purpose for Listening	Whole Group	30 min	
"Garbage"			
Comprehension Questions			
Word Work: <i>Hazardous</i>			
<b>This is a good opportunity to take a break.</b>			
<b>Application</b>			
Sequencing Events	Whole Group Independent	20 min	<input type="checkbox"/> Image Cards 1-7 <input type="checkbox"/> paper <input type="checkbox"/> drawing tools

## ADVANCE PREPARATION

### Note to Teacher

You may wish to remind students that Earth is the narrator in the read-aloud.

### Universal Access

- Wear the Earth Hat for the read-aloud, so it is clear to students that Earth is the narrator.

## CORE VOCABULARY

**decompose, v.** to rot and fall apart into tiny pieces

Example: Fallen apples decompose and become part of the soil.

Variation(s): decomposes, decomposed, decomposing

**dumpster, n.** a very large trash container, usually located near large buildings, such as apartment buildings, stores, schools, and restaurants

Example: We throw our bags of garbage into the dumpster next to our apartment building.

Variation(s): dumpsters

**hazardous, adj.** very dangerous; able to hurt or harm people

Example: The man wore a mask to avoid breathing the hazardous gas.

Variation(s): none

**landfill, n.** a place where garbage is dumped and buried

Example: The workers used a bulldozer to bury the town's trash in the landfill.

Variation(s): landfills

Vocabulary Chart for "Garbage"

Type	Tier 3 Domain-Specific Words	Tier 2 General Academic Words	Tier 1 Everyday Speech Words
Vocabulary	decompose ( <i>descomponer</i> ) dumpster landfill	hazardous	
Multiple Meaning			
Sayings and Phrases	out of sight is out of mind garbage collector		

Lesson 2: Garbage

# Introducing the Read-Aloud



**Speaking and Listening:** Students will recall information about Earth and will recognize that they can gain information from illustrations in informational texts.

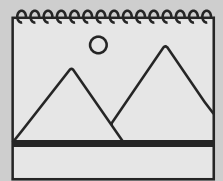
ELA.K.R.2.1; ELA.K12.EE.4.1

## WHAT HAVE WE ALREADY LEARNED? (5 MIN)

### Show image 1A-1: Earth from outer space

- Ask students to identify what this picture shows. (*Earth*)
- Remind students that the planet Earth is made up of three substances.

Flip Book 1A-1



### Check for Understanding

**Recall:** What three things make up Earth? (*land, water, air*)

- Point to the brown and green areas shown on the image of the earth, and ask students to identify these areas. (*land*)
- Point to the blue areas, and ask students to identify these areas. (*oceans or water*)
- Finally, point to the white areas, and remind students that these are clouds; ask them what we call the substance that surrounds the earth in which the clouds are floating. (*air*)
- Now, assist students in identifying why these substances are important and how living things use them.



## Speaking and Listening

### Exchanging Information and Ideas

#### Entering/Emerging

Ask students yes/no questions about Earth and garbage and encourage them to ask their own questions about Earth and garbage.

#### Transitioning/Expanding

Encourage students to build on what the previous student has said about Earth and garbage.

#### Bridging

Challenge students to say something more about what the previous student has said about Earth and garbage.

## MAKING PREDICTIONS ABOUT THE READ-ALOUD (5 MIN)

- Tell students that the title for today's read-aloud is "Garbage."
- Ask students what they think garbage has to do with taking care of the earth.
- Point to a trash can in your classroom, and ask students to make predictions about what they think happens to this garbage after it is thrown out in this trash can. Ask students where they think the garbage goes.
- Tell students to pay attention to the read-aloud to see if their predictions are correct.

Lesson 2: Garbage

# Read-Aloud



**Reading:** Students will describe a landfill and discuss its purpose.

ELA.K.R.2.2; ELA.K12.EE.3.1; ELA.K12.EE.4.1

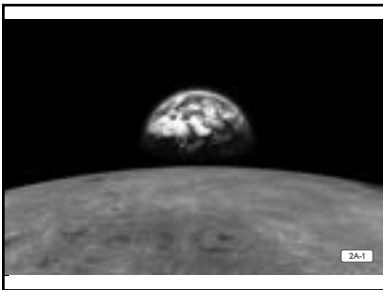
**Language:** Students will demonstrate an understanding of the Tier 2 word *hazardous*.

ELA.K.V.1.1

## PURPOSE FOR LISTENING

- Tell students that today they will learn about what happens to garbage after you throw it in the trash can.
- Tell students to listen carefully to the read-aloud to find out more about today's topic: garbage.

## “GARBAGE” (15 MIN)



**Show image 2A-1: Earth as seen from the moon**

Hi, Good Old Earth here again. I thought I'd start by showing you a different view of me. This is what I look like from the moon. Pretty amazing, huh? I look really small from way up there. It's hard to believe that all of you people—along with your cities, farms, schools,

stores, cars, and houses—fit on Earth. But you do!



**Show image 2A-2: Garbage**

Today, I'm going to talk to you about something very important: garbage. That's right, stinky, ugly garbage. Some people also call it trash, waste, junk, or rubbish. Whatever you call it, it's all the same: stuff you've used and don't need anymore. Trash is probably

not something you think about a lot, but you deal with it every day, and so do I. There's an awful lot of trash on me, and—not to make you feel bad or anything—all of that trash comes from people.



**Show image 2A-3: Birthday party**

Imagine that you go to a birthday party, and they give you some cake and ice cream. And let's say they serve it all on little paper plates, and they give you a paper napkin and a plastic spoon to eat with. You gobble up all the food, and then what do you do with the plate, napkin, and spoon? Do you push them under

the sofa and forget about them? Do you open up the window and throw them in the backyard? I hope not!



**Show image 2A-4: Trash can**

Instead, you put the napkin, plate, and spoon in the trash can. A trash can is sometimes called a garbage can or a wastebasket. Whatever you call it, it's the place where you throw away your trash.



**Show image 2A-5: Taking out the trash**

What is this man doing? He's taking out the trash. I'm guessing this trash can is in his kitchen. Where else do you have trash cans in your house? Some people have one in every room. Lots of people keep one in the bathroom. Is there one in your classroom? How about your school's cafeteria? Which one is bigger?

So, why is this man taking out the trash? Because the trash bag is full. But then what does he do with it? *Where do you think the trash goes next?*



### Show image 2A-6: Dumpster

He'll probably take it outside to a bigger trash can, or maybe to a **dumpster**. *A dumpster is a large trash container that may be next to large buildings. Do you have a dumpster near where you live, or do you just have a large trash can outdoors?*

Once people have thrown their trash bags into a dumpster or an outdoor trash can, they might think, "Out of sight is out of mind." That means they stop thinking about the trash because they can't see it anymore. But I don't stop thinking about it, and I hope you won't either.



### Show image 2A-7: Garbage truck

About once a week, garbage collectors come along in a big garbage truck, pick up the trash can or dumpster, and dump its contents into the back of the truck. And then what do they do? Do they park the truck on the edge of town and leave it there? Do they launch the truck into outer space? Do they call up a magician

and ask him to come and make the trash disappear? *Where do you think the garbage truck takes the trash?*



### Show image 2A-8: Landfill

In many places, they take it to the nearest **landfill**. Some people call the landfill a dump, because that's what you do: you dump your trash there. However, I—Good Old Earth—prefer to call it the landfill to remind people that all they're doing is burying their trash inside me. *A landfill is a place where garbage is dumped and buried.*

This might look like a lot of trash, but trust me when I say that what you see in this picture is just a teeny, tiny bit of all the trash people around the world make every single day!



## Support

Remind students that the phrase “out of sight is out of mind” means you stop thinking about something because you can’t see it anymore.



### Show image 2A-9: Bulldozer

Once the piles of trash in the landfill are big enough, bulldozers move in and push dirt on top of the trash.

Why bury the trash? It goes back to that idea of “out of sight is out of mind.” If the trash is underground, people don’t have to see it, think about it, or smell it. Your town or neighborhood

is a much safer, healthier place to live in because all that garbage is buried underground away from where you live and play. Trust me, though, just because the garbage is buried doesn’t mean it’s gone—at least not for a long, long time.



### Show image 2A-10: Buried garbage, semi-decayed landfill

After it’s buried, some of the garbage starts to rot, or **decompose**. That means the trash breaks down into smaller and smaller pieces and becomes part of the soil underground.

Trash that was food usually decomposes pretty quickly. The paper plate from the

birthday party will decompose, too, but it will take longer than food. It may take several years for the paper plate to decompose. What about the plastic spoon? Unfortunately, plastic doesn’t rot like food and paper. So, that spoon may lie around for hundreds or even thousands of years before it ever breaks down and becomes part of the earth again.

## Challenge

Why do you think it takes a plastic spoon longer to decompose than food?



### Show image 2A-11: Closed landfill

Every landfill gets filled up eventually and a new landfill is needed so people can dump their trash. This picture shows an old landfill that has been closed. Most of the garbage is buried and slowly decomposing underground.

As you can see, plants can start to grow on the land again, and some animals may even move

back in and make their homes there. But landfills can be dangerous. So much garbage underground means that there could be **hazardous** gases and

## Challenge

Why do you think more garbage can’t be dumped in this landfill?

chemicals in the area. *Hazardous means dangerous. Gases are in the air; we can't see them.* The bad gases and chemicals go back into the soil and air, and can even get into the water supply underground. This hurts the living things that live on Earth, breathe the air, and drink the water. Using this land again costs a lot of money and requires a lot of hard work and time. In most cases, land like this will remain a dangerous place for many, many years to come. The garbage you drop in the trash can today is out of sight, but it shouldn't be out of mind. *[Remind students about their original predictions about trash.] So, where does the garbage go? What does the amount of garbage that we throw away have to do with taking care of the earth?*



### Check for Understanding

**One-Word Answer:** What is the main topic of the read-aloud?  
(garbage)

Who creates all the trash on Earth? (people)

## COMPREHENSION QUESTIONS (10 MIN)

- Inferential** Describe what happens to a piece of garbage after you throw it away. (*After you throw away garbage in a trash can inside, you empty it into either a larger outdoor garbage can or a dumpster. After that, the trash is loaded into a garbage truck and then dumped into a landfill.*)
- Inferential** Imagine you are standing near a landfill. Describe what you might see and smell. (*The landfill looks messy and dirty, and it does not smell good.*)
- Inferential** Why can a landfill be a dangerous place? (*The decomposing garbage gives off harmful, or hazardous, gases and chemicals that go into the land, water, and air. These gases and chemicals can make living things sick.*)
- Inferential** Why is it important to think about where our garbage goes? (*Too much garbage makes Earth a dirtier, less healthy place.*)
- Evaluative** *Think Pair Share:* What can you do to create less garbage? (*Answers may vary, but should include support from the read-aloud.*)



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Support

### Reading

If students have difficulty responding to questions, reread pertinent lines of text and refer to specific images.

### Entering/Emerging

Reframe questions as simple yes/no questions (e.g., "Is it important to think about where our garbage goes?").

### Transitioning/Expanding

Provide students with a specific sentence frame (e.g., "It is important to think about where our garbage goes because . . .").

### Bridging

Encourage students to use key details in complete sentences (e.g., "It is important to think about where our garbage goes because too much garbage makes Earth a dirtier, less healthy place.").

## WORD WORK: HAZARDOUS (5 MIN)

1. In the read-aloud you heard, “So much garbage underground means that there could be hazardous gases and chemicals in the area [around landfills].”
2. Say the word *hazardous* with me.
3. *Hazardous* means very dangerous, or able to hurt or harm people.
4. Crossing the street without looking both ways could be very hazardous.
5. Tell about something that is hazardous to people. Try to use the word *hazardous* when you tell about it. [Ask two or three students. If necessary, guide and/or rephrase students’ responses: “One thing that is hazardous to people is . . .”]
6. What’s the word we’ve been talking about?

**Use an Antonyms activity for follow-up.** The opposite of *hazardous* is *safe*. If any of the things I say are hazardous, say, “That is hazardous.” If any of things I say are safe, say, “That is safe.”

- throwing trash into the river (*That is hazardous.*)
- crossing the street when the crossing guard tells you to (*That is safe.*)
- wearing a seat belt when you are in a car (*That is safe.*)
- eating something you are allergic to (*That is hazardous.*)

## Lesson 2: Garbage

# Application



**Writing:** Students will use temporal vocabulary to describe the steps of what happens to garbage after it is thrown away, and then they will write about, illustrate, and share their descriptions.

ELA.K.C.1.4; ELA.K.V.1.1

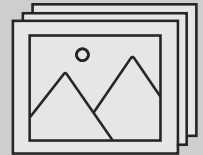
### SEQUENCING EVENTS

#### Show Image Cards 1–7

- Display Image Cards 1–7 in random order, from left to right.
- Ask students to tell you which card shows the very first thing that happens when there is garbage, and reposition this card to the far left as the “first step.”
- Continue with the remaining cards, having students tell you the correct sequence of events, so you can rearrange the cards in the correct order.
- Explain that informational texts sometimes describe things that happen in order or in a sequence. The pictures show the steps in order of what happens to garbage.
- With the cards now in the correct order, point to them one at a time, and ask students to explain what is happening in each picture.
- Help students create a continuous narrative that follows the trash from its creation to its burial at a landfill.
- As students discuss each image, remember to repeat and expand upon each response using richer and more complex language, including, if possible, any read-aloud vocabulary. Encourage the use of temporal vocabulary to help in introducing and sequencing events and ideas: *first*, *then*, *next*, *later*, *finally*, etc.
- Once you have completed the narrative, have students write a sentence and draw a picture to show one step in the process.
  - Assign students a particular part of the process to draw so that all parts of the cycle will be depicted.
- As students complete their drawings and sentences, circulate around the room to provide support.
- Pair students to share their writing.
- If time permits, have several students share their writing with the whole class.
- Display the drawings, sequencing them in order based on which step of the process they illustrate.

End of Lesson

#### Image Cards 1–7



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#### Writing

##### Writing

##### Entering/Emerging

Have students use phrases and familiar vocabulary.

##### Transitioning/Expanding

Have students describe their drawing using short sentence(s).

##### Bridging

Have students describe their drawing using longer, more detailed sentence(s).

#### Challenge

Prompt students to add more details and adjectives to their writing.

## 3

## TAKING CARE OF THE EARTH

# Natural Resources

**PRIMARY FOCUS OF LESSON****Speaking and Listening**

Students will recall what they have learned about garbage and will identify ways people use some natural resources.

ELA.K12.EE.4.1

**Reading**

Students will identify and describe natural resources and will explain why they are important.

ELA.K.V.1.1; ELA.K12.EE.1.1; ELA.K12.EE.4.1

**Language**

Students will demonstrate an understanding of the Tier 2 word *conserve*.

ELA.K.V.1.1

**Reading**

Students will identify natural resources and some items that people can make from them.

ELA.K.C.4.1

**FORMATIVE ASSESSMENT****Activity Page 3.1**

**Natural Resources** Students will match natural resources with the items that can be made from them, demonstrating an understanding of how people use natural resources.

ELA.K.C.4.1

## LESSON AT A GLANCE

	Grouping	Time	Materials
<b>Introducing the Read-Aloud</b>			
What Have We Already Learned?	Whole Group	10 min	<input type="checkbox"/> Know-Wonder-Learn Chart
Essential Background Information or Terms			
<b>Read-Aloud</b>			
Purpose for Listening	Whole Group	30 min	
"Natural Resources"			
Comprehension Questions			
Word Work: <i>Conserve</i>			
<b>This is a good opportunity to take a break.</b>			
<b>Application</b>			
Natural Resources	Whole Group Independent	20 min	<input type="checkbox"/> Activity Page 3.1

## ADVANCE PREPARATION

### Introducing the Read-Aloud

- Prepare to use the Know-Wonder-Learn Chart you displayed in a previous lesson.

### Note to Teacher

You may wish to remind students that Earth is the narrator in the read-aloud.

### Universal Access

- Wear the Earth Hat for the read-aloud, so it is clear to students that Earth is the narrator.

## CORE VOCABULARY

**conserve, v.** to save or protect something

Example: My dad asked me to please take shorter showers to conserve water.

Variation(s): conserves, conserved, conserving

**decayed, adj.** rotten; decomposed

Example: The decayed trash in the landfill smelled awful.

Variation(s): none

**Vocabulary Chart for “Natural Resources”**

Type	Tier 3 Domain-Specific Words	Tier 2 General Academic Words	Tier 1 Everyday Speech Words
Vocabulary	decayed	conserve ( <i>conservar</i> )	
Multiple Meaning			
Sayings and Phrases	natural resources all sorts of things the biggest and best		

## Lesson 3: Natural Resources

# Introducing the Read-Aloud



**Speaking and Listening:** Students will recall what they have learned about garbage and will identify ways people use some natural resources.

ELA.K12.EE.4.1

## WHAT HAVE WE ALREADY LEARNED? (5 MIN)

- Refer to the Know-Wonder-Learn (KWL) Chart on display.
- Review what students know and have learned thus far about taking care of the earth.
- Remind students that in the previous read-aloud, they learned what happens to all of the things we throw away as garbage.
- Ask students to tell you what they learned about garbage, and add their comments to the 'L' column of the chart.

## ESSENTIAL BACKGROUND INFORMATION OR TERMS (5 MIN)

- Tell students that today they are going to hear a read-aloud about the natural resources that come from Earth.



### Check for Understanding

**Recall:** What three things make up Earth? (*land, water, and air*)

- Explain that natural resources are things found in nature that are valuable and very important to people. For example, land, water, and air are natural resources.
- Explain that people use natural resources every day.



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### Speaking and Listening

#### Listening Actively

#### Entering/Emerging

Refer to the KWL chart and ask students questions to help them recall general details from the previous read-alouds.

#### Transitioning/Expanding

Ask students questions to help them recall more specific details from the previous read-alouds.

#### Bridging

Encourage students to recall details from the previous read-alouds with minimal prompting or support.



- Ask students how we might use the three natural resources students have already learned about. (*Answers may vary, but may include that people live on the land and use it to make food; people use water to drink, wash things, and make other things we need, such as medicine; people use air to breathe.*)

## Lesson 3: Natural Resources

# Read-Aloud



**Reading:** Students will identify and describe natural resources and will explain why they are important.

ELA.K.V.1.1; ELA.K12.EE.1.1; ELA.K12.EE.4.1

**Language:** Students will demonstrate an understanding of the Tier 2 word *conserve*.

ELA.K.V.1.1

### PURPOSE FOR LISTENING

- Remind students that they will learn about natural resources and the different ways that people use them.
- Tell students to listen carefully to the read-aloud to find out more about today's topic: natural resources.

### “NATURAL RESOURCES” (15 MIN)



#### Show image 3A-1: Earth

Earth here again. I always like to start by showing you a picture of me, just to remind you how beautiful, amazing, and magnificent I am! Everything people need in order to live happy, healthy lives is available right here on Earth.

What continents can you see in this picture?

*The continents are the seven largest pieces of land on Earth.* You can see Europe, Africa, and a little bit of Asia. You can always spot Europe because of the shape of Italy. That's the one that looks like a boot. *[Point out Africa, Asia, Europe, and Italy in the picture.]*

See the big brown area at the bottom of the picture? That's North Africa. It is almost completely covered by the Sahara Desert, which is the biggest desert and one of the driest, hottest places on Earth. *[Point out the Sahara Desert to students.]*

### Challenge

Ask students to name all seven continents.

## Challenge

Ask students to try to list some natural resources based on the knowledge that natural resources are things you can find in nature.



### Show image 3A-2: Desert sand dunes

You won't find too many people living in the Sahara Desert, but that does not mean that nobody lives there. It is possible to live in the desert. But there are very few natural resources, like water, in the desert, which makes it very difficult for people to live there.



### Show image 3A-3: Forest and river

Let's talk a bit more about natural resources for a minute. Natural resources are things you can find in nature—outside, underground, underwater, or even in the sky. Natural resources are not made by people. Natural resources are part of me, Good Old Earth.

There are two natural resources in this picture. Can you guess what they are? Hint: One is wet, the other is wood. *[Pause for students to respond.]* Water and trees are two examples of natural resources that are very important and valuable to people.



### Show image 3A-4: Child drinking from water fountain

As I just said, one natural resource is water. Of course, one way we use water is to drink it just as it is. Other things we drink, such as juice, soda, and tea also contain water. In what other ways is water a resource? We use water for baths, washing dishes, brushing our teeth, cooking, and watering the garden where we grow food. The list goes on and on.



### Show image 3A-5: Tree products

Trees are natural resources, too. This illustration shows just a few things that come from, or are made out of, trees. What else is made from trees? Since trees are mostly wood, we use that resource to make all sorts of things—wood for houses, furniture, pencils, baseball bats, and a million other uses.

## Support

Help students identify the various objects pictured.

Paper is also made from trees. Everything made out of paper comes from trees, including your notebook, napkins, cereal boxes and other cardboard boxes, and the posters on the wall in your classroom.



**Show image 3A-6: Sky through trees**

This is a pretty picture of trees, but I actually wanted to point out something else: the blue sky above the trees. Trees are also important because of their connection to another natural resource in the sky: air. You really can't see air, but it is all around you and everything else on Earth.

Did you know that trees actually help keep the air clean and fresh for you to breathe? Amazing, right? All plants help clean the air, but trees are the biggest and best air-cleaners. They take in dirty air and put out nice, fresh oxygen, which your body needs to breathe in to stay alive. *Remember, we learned about this when we learned about plants.* The more trees there are, the cleaner the air will be. If the air is too dirty, though, even the trees will get sick.

There are other important natural resources, too. I am going to zip through these pretty quickly, just to give you an idea of the kinds of natural resources you can find scattered around, on, or inside the earth. But don't worry—I am going to tell you more about them over the next few days.



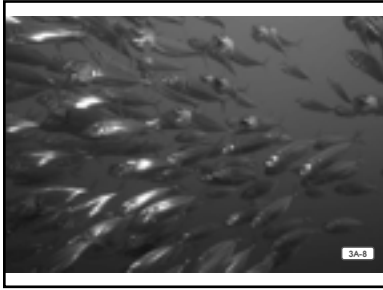
**Show image 3A-7: Soil**

This picture was taken on a farm. What do you see? You can call it dirt, if you want, but farmers call it soil. Soil is a natural resource, and it's where farmers plant their crops. Soil is made up partly of the **decayed** or rotten parts of dead plants and creatures. Worms help to turn the dead things into new soil. It can

take about one thousand years to make one inch of good soil. *[Gesture with your fingers to illustrate one inch.]* Without soil, you wouldn't have plants or vegetables!

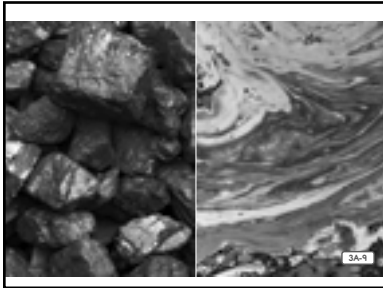
**Support**

Remind students that they heard the word *oxygen* when they learned about plants. Remind students that oxygen is gas found in air and water.



### Show image 3A-8: School of fish

Here is a school of fish. A *school is a group of fish*. What other kind of school do you know about? Fish are important natural resources, too. Why? Because some people and animals eat them. In fact, some animals eat nothing but fish!



### Show image 3A-9: Coal and oil

Do you know what these two natural resources are? [Point to the illustrations.] The one on the left is called coal. The one on the right is oil. Coal and oil are natural resources that come from inside the earth. Coal and oil can be used to make energy, electricity, or fuel to make cars run.

So, now you know what natural resources are! And I'll tell you this: you people sure are clever because you've figured out how to turn all these natural resources—water, trees, air, and the soil on land—into many things that you need.

Over the next several days, I'll teach you how to **conserve** these natural resources as a way to help take care of the earth. To conserve *means to save or protect something*. I'll also teach you that using some natural resources too much can actually hurt the earth, and none of us want that, right?



### Check for Understanding

**Recall:** What is a natural resource? (A *natural resource is something in nature that is important to people and which they can use to make other things.*)

## COMPREHENSION QUESTIONS (10 MIN)

1. **Literal** Name some examples of natural resources that you heard about in the read-aloud. (*Answers may vary, but may include that some examples of natural resources are soil/land, trees, water, air, coal, oil, and fish.*)
2. **Inferential** How do people use some of these natural resources? (*Answers may vary, but may include that we use trees to make paper, cardboard, and wood; we use water to drink, take baths, and water gardens; we breathe the air.*)
3. **Inferential** How do trees and plants help keep the air clean? (*They take in dirty air and give off clean air.*)
4. **Literal** Name two natural resources that can be used to make energy and fuel. (*Two natural resources that can be used to make energy and fuel are coal and oil.*)
5. **Evaluative** *Think Pair Share:* Why do you think natural resources are important? What do you think would happen if we ran out of a particular natural resource, such as clean water? (*Answers may vary, but should include support from the read-aloud.*)

## WORD WORK: CONSERVE (5 MIN)

1. In the read-aloud you heard, “Over the next several days, [you’ll learn] how to conserve these natural resources as a way to take care of the earth.”
2. Say the word *conserve* with me.
3. To conserve is to save or protect something, usually something in nature or a natural resource.
4. Is *conserve* a noun or a verb? (*A verb. At this point, most students have had repeated exposure to the terms noun and verb. Provide support if needed.*)
5. Tell about something that you think is important to conserve. Try to use the word *conserve* when you tell about it. [Ask two or three students. If necessary, guide and/or rephrase students’ responses: “It is important to conserve \_\_\_\_.”]
6. What’s the word we’ve been talking about?

**Use an Antonyms activity for follow-up.** The opposite of *conserve* is *waste*. If any of the things I say is an example of saving something, say, “That is a way to conserve natural resources.” If any of the things I say is an example of wasting something, say, “That is a way to waste natural resources.”

## Support

If students have difficulty responding to questions, reread pertinent lines of the read-aloud and/or refer to specific images.



ENGLISH  
LANGUAGE  
LEARNERS

## Reading

### Offering Opinions

#### Entering/Emerging

Provide students sentence frames using a small set of learned phrases (e.g., “If we ran out of clean water . . .”).

#### Transitioning/Expanding

Provide students sentence frames using an expanded set of learned phrases (e.g., “If we ran out of clean water, I think \_\_\_\_ would happen.”).

#### Bridging

Provide minimal support and guidance for open responses.

- letting the water run in the sink for too long (*That is a way to waste natural resources.*)
- using three paper towels to clean something up when you only need one (*That is a way to waste natural resources.*)
- taking a short shower (*That is a way to conserve natural resources.*)
- leaving the television on when you are not watching it (*That is a way to waste natural resources.*)
- turning off the lights after everyone has left a room (*That is a way to conserve natural resources.*)



## Speaking and Listening

### Exchanging Information and Ideas

#### Entering/Emerging

Ask students yes/no questions about natural resources and encourage them to ask their own questions about natural resources.

#### Transitioning/Expanding

Encourage students to build on what the previous student has said about natural resources.

#### Bridging

Challenge students to say something more about what the previous student has said about natural resources.

### Activity Page 3.1



## Support

Have students complete the activity page as a partner activity.

## Lesson 3: Natural Resources

# Application



**Reading:** Students will identify natural resources and some items that people can make from them.

ELA.K.C.4.1

## NATURAL RESOURCES



### Check for Understanding

**Thumbs Up/Thumbs Down:** Natural resources are materials that come from nature and can be used to make many things. (*thumbs up*)

- Point out a few items in the classroom, and tell what natural resource the item was made from.
    - For example, pick up a pencil and say, “This pencil is made of wood. Wood comes from trees. So, this pencil is made from trees, a natural resource.”
  - Have students look around the room and identify some items that are made from a natural resource. Encourage students to name the natural resource the item was made from.
  - Have students turn to Activity Page 3.1.
  - Point to the left column on the activity page, and explain that you are going to say some things that are made from natural resources or that use natural resources.
  - Point to the right column, and explain that for each item, they will circle the natural resource that it came from. Tell students that you will read the name of the sources in each row for students.
1. **Newspaper:** Is the natural resource for newspaper the ocean, coal, or a tree? (*a tree*)
  2. **Fish:** Is the natural resource for seafood the ocean, coal, or a tree? (*the ocean*)



3. **Light Switch:** Is the natural resource for electricity a tree, the ocean, or coal? (*coal*)
  4. **Watering a Garden:** Is the natural resource for water we use to water our garden coal, the ocean, or a tree? (*the ocean*)
  5. **Log Home:** Is the natural resource for a house, a tree, the ocean, or coal? (*a tree*)
  6. **Drinking Water:** Is the natural resource for drinking water coal, a tree, or the ocean? (*the ocean*)
- After you have given students enough time to complete the activity page, go over the answers with them.
  - If there are incorrect answers, review the thinking process that led you to the correct answer.
    - For example, for picture 3 (light switch), you could say, “I know that coal is sometimes used to make electricity. So the natural resource being used is coal.”

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End of Lesson

## TAKING CARE OF THE EARTH

# Reduce, Reuse, Recycle

**PRIMARY FOCUS OF LESSON****Speaking and Listening**

To prepare for the read-aloud, students will review strategies for monitoring their comprehension and then will recall facts about natural resources and garbage.

ELA.K12.EE.4.1

**Reading**

Students will describe what it means to reduce, reuse, and recycle and why it is important.

ELA.K12.EE.1.1; ELA.K12.EE.3.1; ELA.K12.EE.4.1

**Language**

Students will demonstrate an understanding of the Tier 3 word *reduce*.

ELA.K.V.1.1

**Writing**

Students will write an opinion about a natural resource and revise using peer feedback.

ELA.K.C.1.3; ELA.K.C.1.5; ELA.K12.EE.5.1

**FORMATIVE ASSESSMENT****Writing Activity**

**Interactive Illustrations** Students will interact with their peers while drawing pictures and writing about a natural resource and discuss ways to conserve.

ELA.K.C.1.4; ELA.K.C.1.5; ELA.K12.EE.5.1

## LESSON AT A GLANCE

	Grouping	Time	Materials
<b>Introducing the Read-Aloud</b>			
What Have We Already Learned?	Whole Group	10 min	☐ Image Card 5
Essential Background Information or Terms			
<b>Read-Aloud</b>			
Purpose for Listening	Whole Group	30 min	
“Reduce, Reuse, Recycle”			
Comprehension Questions			
Word Work: <i>Reduce</i>			
<b>This is a good opportunity to take a break.</b>			
<b>Application</b>			
Vocabulary Instructional Activity	Independent	20 min	☐ folded paper ☐ drawing tools
Interactive Illustrations			

## ADVANCE PREPARATION

### Application

- Fold a piece of paper in half for each student to use during the drawing activity.

### Note to Teacher

You may wish to remind students that Earth is the narrator in the read-aloud.

## Universal Access

- Wear the Earth Hat for the read-aloud, so it is clear to students that Earth is the narrator.

### CORE VOCABULARY

**generate, v.** to make; to create

Example: The bake sale will generate enough money to pay for the class trip.

Variation(s): generates, generated, generating

**products, n.** things that are made

Example: Paper and cardboard are two products made from trees.

Variation(s): product

**recycle, v.** to turn trash into something else to be used instead of throwing it away

Example: If I recycle my plastic bottle, it will be used to make something new, such as a plastic cup.

Variation(s): recycles, recycled, recycling

**reduce, v.** to use less of something

Example: I will reduce the amount of paper I use, because that will help save trees.

Variation(s): reduces, reduced, reducing

**reuse, v.** to use something again

Example: I reuse a water bottle over and over instead of using ones that I have to throw away after I finish drinking from them.

Variation(s): reuses, reused, reusing

**Vocabulary Chart for “Reduce, Reuse, Recycle”**

Type	Tier 3 Domain-Specific Words	Tier 2 General Academic Words	Tier 1 Everyday Speech Words
Vocabulary	recycle ( <i>reciclar</i> ) reduce ( <i>reducir</i> ) reuse ( <i>reusar</i> )	generate ( <i>generar</i> ) products ( <i>productos</i> )	
Multiple Meaning			
Sayings and Phrases	recycling bins		

## Lesson 4: Reduce, Reuse, Recycle

Introducing the  
Read-AloudENGLISH  
LANGUAGE  
LEARNERSSpeaking and  
ListeningExchanging Information  
and Ideas**Entering/Emerging**

Ask students yes/no questions about garbage and landfills and encourage them to ask their own questions about garbage and landfills.

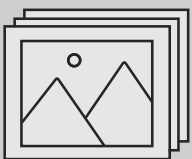
**Transitioning/Expanding**

Encourage students to build on what the previous student has said about garbage and landfills.

**Bridging**

Challenge students to say something more about what the previous student has said about garbage and landfills.

## Image Card 5



**Speaking and Listening:** To prepare for the read-aloud, students will review strategies for monitoring their comprehension and then will recall facts about natural resources and garbage.

ELA.K12.EE.4.1

**WHAT HAVE WE ALREADY LEARNED? (5 MIN)**

## Check for Understanding

**Recall:** What are natural resources? (*Natural resources are things that come from nature, or the earth, and are very important and valuable to people.*)

What are some examples of natural resources? (*Answers may vary, but include land, water, air, trees, and coal.*)

- Remind students that in “Garbage,” the second read-aloud in this domain, they learned about the large amounts of garbage that are dumped and then buried in landfills.

**Show Image Card 5**

- Ask students what happens if landfills get so full that they have no more space for the garbage. (*The landfills have to be closed.*)
- Ask students why landfills can be dangerous places. (*They can be dangerous because of the hazardous gases and chemicals from the decaying trash that can get into the land, water, and air.*)

## ESSENTIAL BACKGROUND INFORMATION OR TERMS (5 MIN)

- Ask students if they think there are any other things that can be done with garbage so that there are fewer and/or smaller landfills.
  - Repeat and expand upon each response, using richer and more complex language, including, if possible, any read-aloud vocabulary.
  - If a student's response includes inaccurate factual information, refer back to earlier read-alouds and/or illustrations to correct any misunderstandings.
- Tell students that today they are going to learn about three ways in which they can help create less garbage in landfills.
- Explain that they are going to learn how to reduce, reuse, and recycle. Have them repeat the words *reduce*, *reuse*, and *recycle* after you.
- Explain to students that talking about the text before reading helps get them ready to read. Remind them that when they read, or listen to you read, they need to monitor what they are reading or hearing to make sure it is making sense to them. If it isn't, they should raise a hand and ask a question or ask you to reread a section.

## Lesson 4: Reduce, Reuse, Recycle

# Read-Aloud



**Reading:** Students will describe what it means to reduce, reuse, and recycle and why it is important.

ELA.K.12.EE.1.1; ELA.K.12.EE.3.1; ELA.K.12.EE.4.1

**Language:** Students will demonstrate an understanding of the Tier 3 word *reduce*.

ELA.K.V.1.1

### PURPOSE FOR LISTENING

- Tell students to listen for ways in which reducing, reusing, and recycling can help conserve or protect natural resources.

### “REDUCE, REUSE, RECYCLE” (15 MIN)



#### Show image 4A-1: Earth covered by trash

So, kids, how much trash does the earth have to deal with every year? Let me ask that another way: how much trash do the people on Earth **generate**, or make, each year? Well, I'm not here to scold you or to try to make you feel bad, but let's just say that people generate an extremely large amount of trash!

People are really the only creatures on the planet who generate any trash. You won't see a bear or a deer putting trash in a trash can. You won't see a monkey in the jungle using a paper napkin to wipe her face. And you probably won't see dogs and cats drinking their water out of plastic bottles. People make trash, so they're the ones who are responsible for taking care of it.



#### Show image 4A-2: Landfill

Every year, people in the United States generate billions of bags full of trash, plus all kinds of other trash that doesn't fit in bags, like old refrigerators and broken furniture. Imagine how much trash is generated all over the world!

### Challenge

What do you think the artist of this picture is trying to say about the earth?

Where does all that trash end up? Can you remember the name of the place in this picture? *[Pause for students to respond.]* It's a landfill. There is an incredible amount of trash buried in landfills, but you can all help.



**Show image 4A-3: Green field and blue sky** *How is this picture different from the picture of the landfill?*

Wouldn't it be nice if we could keep as much land as possible clean and green, like the place in this picture? Can you think of ways you can cut back on the amount of trash you throw away?

Well, I'm about to teach you three important words. If you pay close attention and try to put some of my words into action, then you can really help to make an important difference in the world. *Putting someone's words into action is acting on, or doing, what he or she says.*

Those three words are **reduce**, **reuse**, and **recycle**. Say them a few times. *[Have students repeat the words reduce, reuse, and recycle.]*



**Show image 4A-4: Paper towels on left, and paper towel dispenser on right**

When you reduce the amount you use of something, you use less of it. What do you see in this picture? *[Point to the illustration and have students describe what they see.]*

On the left is a roll of paper towels. On the right is a paper towel dispenser like the one that you

might have in the restroom at your school. Why do you think I am showing you these pictures? What does this have to do with the word *reduce*?

Let's say you wash your hands in the restroom. Instead of grabbing a huge hunk of paper towels, try using just one.

By reducing the number of paper towels that you use, you can do two very important things. First, you will reduce the number of trees that get cut down to make paper towels, and that's a really good thing! Second, you will reduce the amount of trash that goes to a landfill.

## Support

Tell students that a place is where something is located. *Place* also means to put.



So remember, whether you're using paper towels, toilet paper, or any other kind of paper: Reduce! Reduce! Reduce! Don't use more than you really need.



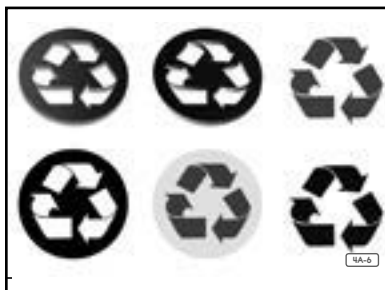
**Show image 4A-5: Child's drawing**

What does it mean to reuse something? It means that you use it again.

If you try, you can probably think of lots of ways to reuse paper. Do you like to draw? Before you ball up a piece of used paper and throw it away, flip it over and see if there's anything on the back.

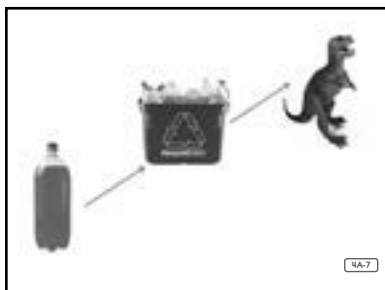
If it's blank, draw a picture on the other side—like this nice one that a child drew of a house on a bright spring day. Then, take it home and hang it up on the refrigerator or bulletin board. Trust me, it will look great, and nobody will ever know or care that there is something on the other side.

Reducing and reusing are two important ways to make sure that you don't send too much trash off to the landfill, but the very best way is by recycling.



**Show image 4A-6: Recycling symbols**

This is the recycling symbol. A symbol is a picture that represents a word or idea. The arrows in this symbol remind you that many things can actually be made into other things.



**Show image 4A-7: Plastic bottle, recycling bin, and toy dinosaur**

Recycling is sort of like reusing. When you recycle something, however, it often gets made into something completely different. For example, your plastic juice bottle can be recycled and made into something else that is plastic. All the plastic that is collected in

recycling bins is taken to factories where it is melted down into liquid plastic and then made into something else. So a plastic bottle that you put in the recycling bin might end up as part of a new plastic toy.



### Show image 4A-8: Recycling bin

Now that you know what it looks like, you might start noticing the recycling symbol in more places. Often, you'll see these three arrows on bins like this one, so you'll know to put recyclable materials in it. A recycling bin is kind of like a trash can, except the things you put in here won't go to a landfill. They will

be turned into other things. Be sure to empty containers, and rinse them if possible, before putting them into a recycling bin.



### Show image 4A-9: Common recyclable materials

Here is a picture of different things that most people use almost every day. All of these things can be recycled. Newspapers, mail, and cardboard boxes are all paper **products**. All of them come from trees, and all of them can be recycled instead of thrown into the trash can.

Glass bottles and jars, aluminum soda cans, metal soup cans, and plastic bottles are all recyclable, too.

What's more, all of these things are made from natural resources, which means the more you recycle, the more natural resources you conserve! *What does it mean to conserve natural resources?*



### Show image 4A-10: Landfill

You might be wondering: why does all that trash end up in landfills if most of it can actually be reused or recycled? That's a good question to ask, and it's one that you'll learn about later. For now, however, I just want you to make sure that you remember those three important 'R' words: *reduce*, *reuse*, and

*recycle*. Say them again! *[Have students chant these three words together a few more times.]*

## Support

Explain that *products* are things that are made. So, *paper products* are things that are made from paper.



### Check for Understanding

**Recall:** Which creatures generate trash? (*only people*)

What are the three things you can do to conserve natural resources? (*reduce, reuse, recycle*)

### Support

If students have difficulty responding to questions, reread pertinent lines of the read-aloud and/or refer to specific images.

**ENGLISH  
LANGUAGE  
LEARNERS**



### Reading

**Exchanging Information  
and Ideas**

#### **Entering/Emerging**

Reframe questions as simple yes/no questions (e.g., “Is it important to reduce, reuse, and recycle?”).

#### **Transitioning/Expanding**

Provide students with a specific sentence frame (e.g., “It is important to reduce, reuse, and recycle because . . .”).

#### **Bridging**

Encourage students to use key details in complete sentences (e.g., “It is important to reduce, reuse, and recycle in order to help conserve natural resources.”).

## COMPREHENSION QUESTIONS (10 MIN)

1. **Inferential** Describe one way to reduce the amount you use of something. (*Answers may vary, but may include that you could use fewer paper towels when drying your hands in the bathroom.*)
2. **Inferential** Describe one way to reuse something. (*Answers may vary, but may include that you can use the other side of a piece of paper to draw something.*)
3. **Inferential** What are recycled materials? (*Recycled materials are things that have already been used, but are made into something new instead of being thrown away into the garbage.*)
4. **Inferential** What natural resource do you save if you reduce, reuse, and recycle paper? (*You save trees.*)
5. **Evaluative** *Think Pair Share:* Why is it important to reduce, reuse, and recycle? (*Answers may vary, but may include that these three actions help to conserve natural resources; they reduce the amount of trash in landfills.*)

## WORD WORK: REDUCE (5 MIN)

1. In the read-aloud you heard, “By reducing the number of paper towels that you use, you can do two very important things. First, you will reduce the number of trees that get cut down to make paper towels, and that’s a really good thing! Second, you will reduce the amount of trash that goes to a landfill.”
2. Say the word *reduce* with me.
3. *Reduce* means to use less of something.
4. Someone might reduce the amount he drives his car in order to save gas, or someone might reduce the number of paper plates she uses in order to save trees.
5. Tell about one way you can reduce waste to help save Earth’s natural resources. Try to use the word *reduce* when you tell about it. [Ask two or three students. If necessary, guide and/or rephrase students’ responses: “I can reduce waste by . . .”]
6. What’s the word we’ve been talking about?

**Use an Antonyms activity for follow-up.** The opposite of *reduce* is *increase*. If I am describing someone reducing waste, say, “That will reduce waste.” If I am describing someone increasing waste, say, “That will increase waste.”

- turning off the water while brushing your teeth (*That will reduce waste.*)
- leaving a light on in an empty room (*That will increase waste.*)
- putting plastic bottles in a recycling bin (*That will reduce waste.*)
- writing one sentence on a piece of paper, then throwing it away (*That will increase waste.*)

## Lesson 4: Reduce, Reuse, Recycle

# Application



**Writing:** Students will write an opinion about a natural resource and revise their writing using peer feedback.

ELA.K.C.1.3; ELA.K.C.1.5; ELA.K12.EE.5.1

### VOCABULARY INSTRUCTIONAL ACTIVITY (5 MIN)

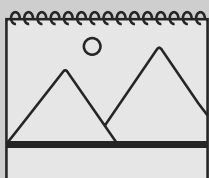
#### Show image 4A-6: Recycling symbols

- Remind students that in the read-aloud today they heard, “This is the recycling symbol.”
- Have students say the word *symbol* aloud with you.
- Explain that a symbol is a picture that represents, or stands for, a word or idea.
- Tell students that the heart is a symbol for love.
- Have students tell about a symbol that they have seen.
  - Remind them to use the word *symbol* when they tell about it.
  - Ask two or three students. If necessary, guide and/or rephrase students’ responses: “I have seen a symbol that stands for . . .”
- Ask students to repeat the word you’ve been talking about.
- Ask students to draw a symbol that they know of, or have them make up their own symbol, that represents, or stands for, a word or idea.

### INTERACTIVE ILLUSTRATIONS (15 MIN)

- Give each student a piece of paper that has been folded in half.
- Provide simple instructions. Ask students to listen carefully because you will ask them to repeat the instructions.

#### Flip Book 4A-6



#### Support

If students have trouble thinking of examples, you might suggest symbols they might see at a crosswalk, on trash cans, on bathroom doors, etc.

- First, students will choose the natural resource that they think is most important (e.g., trees, water, air, coal, fish, oil).
  - Next, on one-half of the paper, they will draw the natural resource they chose.
  - On the other half of the paper, they will write the reason, or give their opinion about, why they think this resource is important. You may want to provide a sentence frame, such as “I think that \_\_\_\_\_ is important because \_\_\_\_\_.”
- Before students begin, ask them to repeat the instructions.
  - Once students have completed their drawings and sentences, pair each student with a partner and ask students to trade writing.
  - Tell them they will share their writing with their partner. Remind them that it is important to take turns when sharing.
  - After students have shared for no more than two minutes, have them ask each other if there are details they could add to their writing or drawing to make it better.
  - After students give each other feedback, give them additional time to revise their writing/drawing. Remind students to also check and correct any convention errors, such as in spelling or punctuation.
  - Have students turn to their partner and ask their own question.
  - Call on a few students to share their questions with the class.
  - Next, have the same (or different) partners ask each other for a suggestion on how to conserve a natural resource.
    - For example, if the natural resource is trees, students might suggest, “Use fewer paper towels.”
  - If time allows, have partners share the advice they have for reducing waste with the class.
  - As students discuss their writing and drawings, remember to repeat and expand upon each response, using richer and more complex language, including, if possible, any read-aloud vocabulary.

End of Lesson



**ENGLISH  
LANGUAGE  
LEARNERS**

## Writing

### Writing

#### **Entering/Emerging**

Have students use phrases and familiar vocabulary to describe their drawing.

#### **Transitioning/Expanding**

Have students describe their drawing using short sentence(s).

#### **Bridging**

Have students describe their drawing using longer, more detailed sentence(s).

## 5

## TAKING CARE OF THE EARTH

# Recycle! Recycle! Recycle!

**PRIMARY FOCUS OF LESSON****Speaking and Listening**

Students will recall the three ways to help conserve natural resources and will discuss items that can be recycled.

ELA.K.12.EE.4.1

**Reading**

Students will explain why recycling is important.

ELA.K.R.2.2; ELA.K.12.EE.4.1

**Language**

Students will demonstrate an understanding of the Tier 2 word *solution*.

ELA.K.V.1.1

**Writing**

Students will describe the steps involved in recycling an item.

ELA.K.C.1.4

**FORMATIVE ASSESSMENT****Recycling Process Writing**

**Recycling Process** Students will write about and draw a step in the recycling process.

ELA.K.C.1.4

## LESSON AT A GLANCE

	Grouping	Time	Materials
<b>Introducing the Read-Aloud</b>			
What Have We Already Learned?	Whole Group	10 min	<input type="checkbox"/> recycling bin(s) <input type="checkbox"/> items that can be recycled
Essential Background Information or Terms			
<b>Read-Aloud</b>			
Purpose for Listening	Whole Group	30 min	
"Recycle! Recycle! Recycle!"			
Comprehension Questions			
Word Work: <i>Solution</i>			
<b>This is a good opportunity to take a break.</b>			
<b>Application</b>			
Sayings and Phrases	Whole Group Independent	20 min	<input type="checkbox"/> paper <input type="checkbox"/> drawing tools
The Recycling Process			

## ADVANCE PREPARATION

### Introducing the Read-Aloud

- Bring in recycling bin(s) to show students what they look like.
- Bring in items to provide examples of the types of materials that can be recycled.

### Note to Teacher

You may wish to remind students that Earth is the narrator in the read-aloud.



Proverbs are short, traditional sayings that have been passed along orally from generation to generation. These sayings usually express general truths based on experiences and observations of everyday life. While some proverbs do have literal meanings—that is, they mean exactly what they say—many proverbs have a richer meaning beyond the literal level. It is important to help students understand the difference between the literal meanings of the words and their implied, or figurative, meanings.

### Universal Access

- Wear the Earth Hat for the read-aloud, so it is clear to students that Earth is the narrator.

### CORE VOCABULARY

**aluminum, n.** a type of metal used to make cans, foil, etc.

Example: Soda cans are made of aluminum, a metal that can be recycled.

Variation(s): none

**furnace, n.** a large oven in which a great amount of heat is produced

Example: The furnace in the glass factory is used to melt glass.

Variation(s): furnaces

**solution, n.** an answer to a problem

Example: Once you have a solution to the math problem, write your answer on your paper.

Variation(s): solutions

**sorted, v.** separated into different groups according to certain characteristics

Example: He sorted his crayons into reds, blues, yellows, and greens.

Variation(s): sort, sorts, sorting

Vocabulary Chart for “Recycle! Recycle! Recycle!”			
Type	Tier 3 Domain-Specific Words	Tier 2 General Academic Words	Tier 1 Everyday Speech Words
Vocabulary	aluminum ( <i>aluminio</i> ) furnace	sorted	
Multiple Meaning		solution ( <i>solución</i> )	
Sayings and Phrases			

## Lesson 5: Recycle! Recycle! Recycle!

# Introducing the Read-Aloud



**Speaking and Listening:** Students will recall the three ways to help conserve natural resources and will discuss items that can be recycled.

ELA.K12.EE.4.1

## WHAT HAVE WE ALREADY LEARNED? (5 MIN)



### Check for Understanding

**Recall:** What are three ways that could help conserve natural resources? (*reduce, reuse, recycle*)

- Ask students to give examples of natural resources that they have learned about so far. (*Answers may vary, but may include land, water, air, trees, and coal.*)
- Ask students to give specific examples of what they can do to reduce, reuse, or recycle their use of these resources. (*Answers may vary.*)

## ESSENTIAL BACKGROUND INFORMATION OR TERMS (5 MIN)

- Explain to students that when something is recycled, there is a process or a series of steps that take place to turn the used material into something new.
- Tell students that the first step is for us to put the recyclables aside and save them in a special container instead of putting them in a trash can.
- Show students the recycling bin(s) you have brought to class, and ask if they have ever seen bins that are similar either at home or school.
- Show some of the items in the bin(s) to provide examples of the types of materials that can be recycled.

## Support

Remind students that the word *reduce* means to use less or fewer things that come from natural resources. The word *reuse* means to use things that come from natural resources over again instead of using them once and throwing them away. The word *recycle* means to put something into a recycling container instead of a trash can so that it can be used to make something new.



## Speaking and Listening

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### Exchanging Information and Ideas

#### **Entering/Emerging**

Ask students yes/no questions about recyclables and encourage them to ask their own questions about recyclables.

#### **Transitioning/Expanding**

Encourage students to build on what the previous student has said about recyclables.

#### **Bridging**

Challenge students to say something more about what the previous student has said about recyclables.

- Ask students to name some recyclables and discuss whether they save any of these items either at home or at school.
  - Repeat and expand upon each response, using richer and more complex language, including, if possible, any read-aloud vocabulary.

Lesson 5: Recycle! Recycle! Recycle!

# Read-Aloud



**Reading:** Students will explain why recycling is important.

ELA.K.R.2.2; ELA.K12.EE.4.1

**Language:** Students will demonstrate an understanding of the Tier 2 word *solution*.

ELA.K.V.1.1

## PURPOSE FOR LISTENING

- Tell students that today they will learn about the different steps that take place when something is recycled.
- Tell students to listen carefully to the read-aloud to find out more about today's topic: recycling.

## “RECYCLE! RECYCLE! RECYCLE!” (15 MIN)



### Show image 5A-1: Recycling symbol superimposed on Earth

*What do you think the artist is trying to say by placing the recycling symbol on top of Earth?*

I asked an artist to make a picture with these green recycling arrows on top of me. I hope this will help you remember that recycling is very healthy for good old Earth. Recycling is so important that I have come back to tell

you even more about it, just to make sure that you understand how much good you are doing when you recycle something. The very first step in the recycling process is, instead of throwing recyclable materials away in an ordinary trash can, you must put these things aside and save them in another container, like a recycling bin.

## Challenge

Ask students why they think everything has to go in the right place at a recycling center.



### Show image 5A-2: Recycling center

Once you have saved a lot of things to be recycled, they need to be brought to a place called a recycling center. Sometimes people bring their own recyclables directly to the recycling center. In this picture you can see a place with several large bins of different colors. People can bring all their recyclable

materials here, but everything has to go in the right place. Glass goes in one bin, cans in another, paper in another, and so on.

In some places, though, people do not have to go to the recycling center themselves. Instead, they can set out their recycling bins by the side of the road, just like they set out their garbage cans, and a special recycling truck comes by to empty the bins and take the recyclables to the recycling center. *Now some cities and towns even have single-stream recycling, which lets you put all your recyclables into one large container and it gets sorted at the recycling center.*



### Show image 5A-3: Plastic bottle caps to be recycled

I don't know about you, but I think recycling is very interesting. Here's a colorful recycling picture. Can you guess what's being recycled in this picture? *[Pause for students to respond.]*

This is a picture of plastic bottle tops! All of these bottle tops were collected at a recycling center. Then they were taken to a plastics recycling factory where they were pressed together in a big colorful mishmash. Later, these bottle tops will be melted down into a liquid so that they can be remolded and turned into something new made of plastic.

Look around your classroom right now, and see if you can spot anything made of plastic. I bet you can! Maybe it's even made from recycled plastic. Or, maybe it's something you can recycle when you're done using so it can be made into something else.



### Show image 5A-4: Aluminum cans

What's in this picture? Here are some cans made out of a metal called **aluminum**. Maybe you have had drinks that come in cans like these. If you throw a can away into a trash can and send it off to a landfill, it will take at least five hundred years for that aluminum can to break down and decompose! But if you put the

same can in a recycling bin instead, the aluminum metal can be reused, and the cans don't have to be buried in a landfill.



### Show image 5A-5: Recycling stages

Let's take a closer look at how cans are recycled. This diagram, or drawing, shows what happens when you recycle an aluminum can. Aluminum is a natural resource that is mined and dug out of the earth. From there, it goes to a factory where the raw aluminum is made into metal cans that can be filled with

things, such as soda. After you buy a can of soda and drink it, you are left with an old, used can. You can throw the can in the garbage, but then it will end up in a landfill. A better, more responsible **solution** is to put the empty can into a recycling bin. *A solution is an answer to a problem.*



### Show image 5A-6: Crushed cans

These cans have already been **sorted** and cleaned at a recycling center and are now at a special recycling factory for aluminum. *So, plastic things go to a plastics recycling factory, and aluminum cans go to an aluminum recycling factory.* Workers at the recycling factory crush the cans and melt them down in

a big cooker with lots of other cans. Maybe they'll make a new can, and the cycle will begin all over again—the can gets filled with something to eat or drink. Someone uses the can and puts it in a recycling bin. The can is brought to a recycling center and finally a factory, and so on, again and again.

## Support

Tell students that aluminum is a type of metal used to make cans, foil, etc.

## Support

Tell students that a furnace is a large oven in which a great amount of heat is produced.



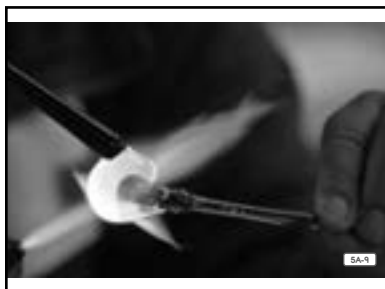
### Show image 5A-7: Glass bottles

What are these bottles made of? *[Pause for students to respond.]* These bottles are made of glass. If you tossed bottles like these in the trash, they would be hauled away to a landfill. Some kinds of glass take about three thousand years to decompose. That's a long time! Luckily, many glass items can be recycled instead.



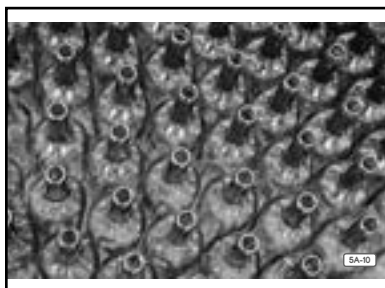
### Show image 5A-8: Recycling glass

At the glass recycling factory, the glass is crushed into little pieces. Crushed glass is then put into a very hot **furnace** and melted into a super-hot, glowing liquid. With enough heat, glass melts just like ice melts.



### Show image 5A-9: Melting piece of glass

Here is a little piece of glass that has been heated up so much that it is just about to melt and turn to liquid. Now imagine a big pot full of little bits of glass like this, all eventually melting together into a thick, hot, syrupy liquid. That's what you would find at a glass recycling factory.



### Show image 5A-10: A bottle-making factory

This picture shows the inside of a bottle-making factory. These are freshly made bottles. They are so hot you dare not touch them! But they'll be cool and hard again soon.

Recycling really isn't hard to do, but I'll admit that it does require a little bit of extra work. Taking the time to decide whether to throw something away in the garbage can or whether to put it in the recycling bin doesn't always make it to the top of the to-do list. But it really is worth the time to take care of good old Earth!

Be sure to ask yourself the next time you use a bottle, a can, or anything else: Is this recyclable? Can I conserve natural resources by making it into something useful again?



### Check for Understanding

**One-Word Answer:** What is the main topic of the read-aloud?  
(*recycling*)

## COMPREHENSION QUESTIONS (10 MIN)

1. **Literal** What is recycling? (*You are recycling when you save something so that it can be recycled and reused to make something new instead of throwing something away and having it sent to a landfill.*)
2. **Literal** Name some things you can recycle. (*Answers may vary, but may include that you can recycle glass, plastic, aluminum, and paper.*)
3. **Inferential** What happens to the things you take to a recycling center? (*They go to a recycling factory and get turned into new things to be used again.*)

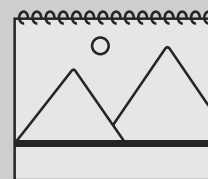
### Show images 5A-8–5A-10

4. **Evaluative** Describe the steps taken to recycle glass. (*The glass gets recycled at a recycling center and then taken to a glass factory, where it is crushed, then it is melted, and finally people use the melted glass to make new glass items.*)
5. **Evaluative** Is it important to recycle? Why or why not? (*Answers may vary, but should include support from the read-aloud. Answers may include that recycling helps reduce the size of landfills and conserves natural resources.*)

## Support

If students have difficulty responding to questions, reread pertinent lines of the read-aloud and/or refer to specific images.

### Flip Book 5A-8–5A-10



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## Reading

### Offering Opinions

#### Entering/Emerging

Provide students sentence frames using a small set of learned phrases (e.g., “Recycling is important . . .”).

#### Transitioning/Expanding

Provide students sentence frames using an expanded set of learned phrases (e.g., “I think it is important to recycle because . . .”).

#### Bridging

Provide minimal support and guidance for open responses.



## WORD WORK: SOLUTION (5 MIN)

1. In the read-aloud you heard, “A better, more responsible solution is to put [empty cans] into a recycling bin.”
2. Say the word *solution* with me.
3. A solution is an answer to a problem.
4. Mark and Carmen both wanted to play with the blocks, so they decided that the best solution would be to take turns.
5. Tell about one possible solution to help keep Earth clean. Think about some of the problems that make the earth dirty or polluted, and then think of a solution to that problem. Try to use the word *solution* when you tell about it. [Ask two or three students. If necessary, guide and/or rephrase students’ responses: “One solution to help keep Earth clean is . . .”]
6. What’s the word we’ve been talking about?

**Use an Antonyms activity for follow-up.** The opposite of a solution is a problem. If something I say sounds like a solution, say, “That is a solution.” If something I say sounds like a problem, say, “That is a problem.”

- The family cat is stuck in a tall tree. (*That is a problem.*)
- A fireman comes and gets the cat down. (*That is a solution.*)
- Two sisters are arguing about who gets the last cupcake. (*That is a problem.*)
- The sisters decide to share the cupcake. (*That is a solution.*)

Lesson 5: Recycle! Recycle! Recycle!

# Application



**Writing:** With assistance, students will describe the steps involved in recycling an item.

ELA.K.C.1.4

## SAYINGS AND PHRASES (5 MIN)

### A Place for Everything, and Everything in Its Place

- Ask students if they have ever heard anyone say “a place for everything, and everything in its place.”
- Have students repeat the saying.
- Explain that this saying means that there should be a proper place for everything and that things should be returned to where they belong after they are used.
- Do you remember what the word *in* means? (*It means where something is.*)
- Explain to students that one situation in which this saying can be used is when they finish doing crafts.
  - Students should clean up after themselves and return all supplies to where they belong.
- Have students orally fill in the blank for the following sentences: The glue bottles belong \_\_\_\_\_ the cupboard.” (*in*) “The crayons go \_\_\_\_\_ the bin.” (*in*) “You should put your pencil \_\_\_\_\_ your desk.” (*in*)
- Tell students that this saying can also be used when it comes to recycling.
- Explain that when people recycle, they should put everything in its proper place.
  - This means that people should sort recyclable items and place them in the correct bins—for example, empty water bottles in the plastics bin, newspaper in the paper bin, empty soda cans in the aluminum bin.
- Any time students encounter a situation in which they should put things in their proper place, be sure to use the saying “a place for everything, and everything in its place.”

## RECYCLING STORY (15 MIN)

### Support

If students struggle to decide what to draw, then select a step in the recycling process for them.

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### Writing

#### Writing

#### Entering/Emerging

Have students use phrases and familiar vocabulary in their writing.

#### Transitioning/Expanding

Ask students to add more detail to their writing.

#### Bridging

Provide support as needed. Encourage students to use more complex vocabulary.

### Support

Alternatively, have students dictate a caption for you to record.



### Check for Understanding

**Recall:** What did you learn about recycling from today's read-aloud? (*Answers may vary, but may include that recycling is when you save something so that it can be recycled and reused to make something new; people can recycle items like glass, plastic, aluminum, and paper; people can take their items to a recycling center.*)

What are the steps involved in the recycling process? (*The item gets recycled at a recycling center and then gets taken to a factory, where it is broken down so that it can be made into new items.*)

- Remind students that some informational texts describe a sequence of steps and that students just read an informational text about the steps for recycling. Have students draw a picture of one step in the recycling process.
- Encourage students to add detail, so that it is clear what item is being recycled and in what step of the process it is.
- After completing their drawings, have students write a sentence or sentences to describe that step in the process.
- Circulate around the room to provide prompting and support. Encourage students to read their writing aloud to you.
- Repeat and expand upon students' responses, using richer and more complex language, including, if possible, any read-aloud vocabulary.
- As time allows, have students present their writing and drawing to the class.

End of Lesson

## TAKING CARE OF THE EARTH

## Composting

## PRIMARY FOCUS OF LESSON

**Speaking and Listening**

Students will review ways to help conserve natural resources.

ELA.K.12.EE.4.1

**Reading**

Students will describe composting and will explain why it's important for taking care of the earth.

ELA.K.12.EE.1.1; ELA.K.12.EE.3.1; ELA.K.12.EE.4.1

**Language**

Students will demonstrate an understanding of the Tier 3 word *compost*.

ELA.K.V.1.1

**Writing**

Students will write their own story about the steps of the composting process using pronouns and appropriate sequence words.

ELA.K.C.1.2; ELA.K.C.3.1; ELA.K.V.1.1

## FORMATIVE ASSESSMENT

**My Composting Story**

**Writing** Students will write their own composting stories using information from the Read-Aloud.

ELA.K.C.1.2; ELA.K.C.3.1; ELA.K.V.1.1

**Writing Studio**

If you are using Writing Studio, you may begin Unit 6 Lesson 1 after completing this Knowledge lesson. If you have not done so already, you may wish to review the Writing Studio materials and their connections to this domain.

## LESSON AT A GLANCE

	Grouping	Time	Materials
<b>Introducing the Read-Aloud</b>			
What Have We Already Learned?	Whole Group	10 min	<input type="checkbox"/> Know-Wonder-Learn Chart
Essential Background Information or Terms			
<b>Read-Aloud</b>			
Purpose for Listening	Whole Group	30 min	
“Composting”			
Comprehension Questions			
Word Work: <i>Compost</i>			
<b>This is a good opportunity to take a break.</b>			
<b>Application</b>			
My Composting Story	Whole Group Independent	20 min	<input type="checkbox"/> Image Cards 8–11 <input type="checkbox"/> Activity Page 6.1 <input type="checkbox"/> paper, scissors, glue
<b>Take-Home Material</b>			
Family Letter			<input type="checkbox"/> Activity Page 6.2

## ADVANCE PREPARATION

### Note to Teacher

You may wish to remind students that Earth is the narrator in the read-aloud.

### Universal Access

- Wear the Earth Hat for the read-aloud, so it is clear to students that Earth is the narrator.

## CORE VOCABULARY

**compost, n.** a mixture of decaying foods and other natural things, like leaves and grass clippings, that eventually turn into soil

Example: Tim adds his uneaten vegetables to the compost in a bin outside.

Variation(s): composts

**leftovers, n.** uneaten food that remains after a meal

Example: After Thanksgiving, we use our turkey leftovers to make sandwiches.

Variation(s): leftover

**nutrients, n.** things needed by living things to grow and stay healthy, such as vitamins and minerals

Example: We can stay healthy by eating foods that are full of nutrients.

Variation(s): nutrient

**process, n.** a series of steps taken to do something

Example: Following a recipe is a step-by-step process.

Variation(s): processes

Vocabulary Chart for “Composting”

Type	Tier 3 Domain-Specific Words	Tier 2 General Academic Words	Tier 1 Everyday Speech Words
Vocabulary	compost nutrients	leftovers process	
Multiple Meaning			
Sayings and Phrases			

**Lesson 6: Composting**

# Introducing the Read-Aloud



**Speaking and Listening:** Students will review ways to help conserve natural resources.

**ELA.K12.EE.4.1**

## WHAT HAVE WE ALREADY LEARNED? (5 MIN)

- Refer to the Know-Wonder-Learn (KWL) Chart that you displayed earlier in this domain.
- Remind students that the KWL Chart is about the things that they know, wonder, and have learned about taking care of the earth.
- Review the 'K' and 'L' columns that were created earlier, emphasizing in particular the topics related to recycling.

## ESSENTIAL BACKGROUND INFORMATION OR TERMS (5 MIN)

- Tell students that today they are going hear a read-aloud about another type of recycling.
- Explain that instead of learning about how to recycle cans, bottles, or paper, as in the previous read-alouds, they are going to learn how to recycle certain kinds of leftover food!
- Tell students that this type of recycling of leftover foods is called composting.
- Explain that like other recycling, the process of composting starts with sorting things into different groups. Instead of sorting bottles and cans into bins, people sort leftover food according to whether the food can or cannot be composted.
- Explain that in the read-aloud, students will also hear about the other steps involved in composting and how the leftover food eventually changes into rich soil that can be used to grow more healthy plants.
- Explain to students that composting is one way to pitch in and help Earth stay clean.

- Ask if any students and their families compost leftover food scraps at home.
- Ask what other ways students' families pitch in to keep Earth clean and healthy.



### Check for Understanding

**Recall:** What are the three Rs that help to conserve natural resources? (*reduce, reuse, recycle*)

- Encourage students to name good habits to have if they want to reduce, reuse, and recycle things, such as turning off the water when brushing their teeth or sorting their recyclable items before going to a recycling center.
  - Repeat and expand upon each response, using richer and more complex language, including, if possible, any read-aloud vocabulary.



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### Speaking and Listening

#### Exchanging Information and Ideas

#### **Entering/Emerging**

Ask students yes/no questions about the three Rs and encourage them to ask their own questions about the three Rs.

#### **Transitioning/Expanding**

Encourage students to build on what the previous student has said about the three Rs.

#### **Bridging**

Challenge students to say something more about what the previous student has said about the three Rs.



## Lesson 6: Composting

# Read-Aloud



**Reading:** Students will describe composting and will explain why it's important for taking care of the earth.

ELA.K.12.EE.1.1; ELA.K.12.EE.3.1; ELA.K.12.EE.4.1

**Language:** Students will demonstrate an understanding of the Tier 3 word *compost*.

ELA.K.V.1.1

### PURPOSE FOR LISTENING

- Tell students that in this read-aloud, they will hear about the Smith family, a family that composts.
- Tell them to listen carefully and try to remember each step in the composting process.
- Tell students that not all foods can be recycled and composted, so ask them to also listen carefully to find out which foods people should and should not put in the compost pile.

### “COMPOSTING” (15 MIN)



#### Show image 6A-1: Earth covered with vegetable garden

*Describe this illustration. What do you already know about plants?*

Earth here. Once again, I've asked an artist friend of mine to help teach you an important lesson. She drew a picture of me covered with all different kinds of plants and vegetables.

Why? This will help remind you that you can get everything you need in order to thrive and survive from me, Good Old Earth.



### Show image 6A-2: Lush garden

Even if you don't live on a farm, you can still make a little vegetable garden or grow a few potted plants, whether you want to grow flowers, vegetables, or both. You probably know that vegetables are very good for your body, and there's nothing healthier than a vegetable that you grow in your own garden.

Plus, gardens are good for the earth—they provide food for bees and other animals. Do you remember that when we talked about natural resources and trees, we talked about how trees take in the dirty air and then put out fresh, clean air afterward? Gardens also help keep the air a little cleaner and the earth a little prettier.

Today I want to tell you about a special kind of recycling that is good for you, good for your garden, and good for the earth. Once again, my artist friend has made some pictures to go along with the story I'm about to tell.



### Show image 6A-3: Smith family

Meet the Smiths. As you can see, the Smiths prepared a dinner of spaghetti, bread, and salad. After everyone has finished eating dinner, it will be time to clean up. They made a lot of spaghetti and salad, so they'll have some **leftovers**. *Leftovers are the uneaten foods that remain after a meal.* Mrs. Smith will put these

leftovers in reusable containers and then in the refrigerator for lunch or a snack the next day.

But some of the leftovers can't be eaten. What will the Smiths do with these leftovers? They have a clean-up plan that is friendly to the earth and good for their garden!



### Show image 6A-4: Mr. Smith and Jamie cleaning plates and other leftovers

It's Mr. Smith's job to clear the table. He puts the trash into the garbage can, and he scrapes bits of spaghetti, tomato sauce, and salad into a small pail.

Then the youngest Smith child, Jamie, adds vegetable scraps left over from making the salad, such as carrot and cucumber peelings *or the skins peeled off the carrots and cucumbers*, celery leaves, and loose pieces of lettuce. Jamie could throw these in the garbage, but instead he puts them in the pail. This leftover food won't end up in a landfill. But do you have any idea what will happen to it? *[Allow time for students to guess what the Smiths will do with the scraps in the pail.]*



**Show image 6A-5: Chris dumping food scraps onto compost pile**

Jamie's brother, Chris, takes the container outside and dumps it into a large bin. What is going on here? Is Chris making leftover soup outside? Do the Smiths love their leftover food scraps so much that they keep a pile of it in their backyard?

Actually, the answer is yes. The Smiths do love their leftover food scraps. You see, the Smiths know that if they put food scraps in a bin to make **compost**, they will be rewarded in at least two ways. First, they won't have to send as much garbage to the landfill. That is something they can feel good about; by composting, they are being friendly to the earth and not loading the planet up with trash. Second, if they keep adding to their compost pile and taking good care of it, then they'll end up with a pile of soil full of **nutrients** for the garden. *Nutrients, like vitamins and minerals, are needed by living things to grow and stay healthy.*

The soil that comes from composting is called compost, and it is very good for plants. Putting compost on plants is like feeding them super-vitamins. The compost is full of nutrients that make the plants grow stronger and healthier.

**Challenge**

Ask students, "What kinds of living things could grow in soil that is full of nutrients?"



**Show image 6A-6: Collage with lots of materials to use in composting**

The Smiths are careful to add only materials that make good compost. They don't add meats or oily foods like butter, as these kinds of foods can make the compost smell bad and attract rodents and other wild animals. *So, what kinds of foods should you not put in the compost pile?*

Rotten fruits and vegetables—including leftover Halloween jack-o'-lanterns—and eggshells and coffee grounds are perfect for composting. The Smiths also add leaves, grass clippings, and other stuff from the yard that they mix with the leftover foods. *[Point to illustration.] What foods can go in a compost bin?*

Every week or so, the Smiths stir the compost around with a rake or pitchfork and, when it's particularly dry, they water the pile with a garden hose. Then the sun begins to shine, and the pile heats up. *With the warm heat from the sun and the water, it's almost like "cooking" everything that is in the compost pile!* Heat and moisture make the materials in the compost bin break down even faster. *Another way of saying that the materials break down is to say that the materials decay, rot, or decompose.* Some people even add worms to their compost bins to eat the old food and turn it into garden soil even faster—worms are nature's own recyclers! After a few weeks, the food in the compost bin won't look like food any more—it will look like nice, rich, dark soil.



**Show image 6A-7: Mrs. Smith scooping compost from bin**

When the compost is ready, Mrs. Smith scoops a shovelful from the bin. She puts the compost around a new tomato plant she has planted in her garden. The roots of the tomato plant begin to take in water and food from the composted soil. Soon the plant will grow strong and healthy, thanks in part to the nutrients from the compost.



**Show image 6A-8: Jamie and Mrs. Smith picking a tomato**

A couple of months later, the tomato plant is big and healthy and full of nice red tomatoes. Jamie helps his mom pick some of the tomatoes on the plant. And what do you suppose happens next? *[Pause for possible answers.]*

What happens next is that the Smiths use the tomatoes to make a salad. And what do you suppose they do with the leftovers from that salad? They toss them in the compost pile, of course, so the **process** can start all over again.

**Support**

Explain that *process* means a series of steps taken to do something.



### Check for Understanding

**Recall:** What is compost? (*Compost is a mixture of decaying foods and other natural things that eventually turn into soil.*)

Why is compost good for gardens? (*Compost has lots of nutrients that will help the plants grow big and strong.*)

## Support

If students have difficulty responding to questions, reread pertinent lines of the read-aloud and/or refer to specific images.

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## Reading

**Exchanging Information  
and Ideas**

### Entering/Emerging

Reframe questions as simple yes/no questions (e.g., “Is composting helpful in taking care of the earth?”).

### Transitioning/Expanding

Provide students with a specific sentence frame (e.g., “Composting helps by . . .”).

### Bridging

Encourage students to use key details in complete sentences (e.g., “Composting helps take care of the earth because it reduces the garbage in landfills.”).

## COMPREHENSION QUESTIONS (10 MIN)

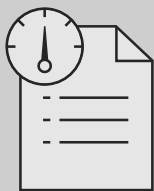
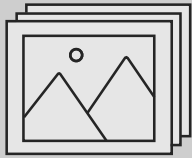
1. **Literal** What is composting? (*You start by saving certain kinds of foods, like vegetable and fruit scraps, outside in a pile or bin. The food scraps eventually turn into good soil.*)
2. **Evaluative** Describe the process of composting. (*The process of composting includes sorting leftovers; dumping foods to be composted in a bin outside; watering and mixing the decaying scraps with a shovel or a rake; waiting for the food to decompose into soil; and using the soil in your garden to grow new plants.*)
3. **Inferential** What are some things that you can compost? What are some things that you should not compost? What is the difference? (*Answers may vary, but may include that you can compost vegetables, spaghetti, coffee grounds, and leaves; you should not compost meat, oil, and buttery foods. The difference is that the items that you should not compost make the compost smell bad and attract wild animals, but the other items do not.*)
4. **Evaluative** *Think Pair Share:* How does composting leftovers help take care of the earth? (*Composting reduces the garbage in landfills and creates rich soil for gardens.*)

## WORD WORK: COMPOST (5 MIN)

1. In the read-aloud you heard, “[T]he Smiths know that if they put food scraps in a bin to make compost, they will be rewarded in at least two ways.”
2. Say the word *compost* with me.
3. Compost is a mixture of decaying foods and other natural things, like leaves and grass clippings, that eventually turn into soil.
4. You can make compost out of scraps of food or even leaves and cut grass.
5. Tell about something you can turn into compost. Try to use the word *compost* when you tell about it. [Ask two or three students. If necessary, guide and/or rephrase students’ responses: “One thing I can turn into compost is \_\_\_\_.”]
6. What’s the word we’ve been talking about?

**Use a Making Choices activity for follow-up.** If any of the things I say would make good compost, say, “That would make good compost.” If any of the things I say would not make good compost, say, “That would not make good compost.”

- steak (*That would not make good compost.*)
- shredded lettuce (*That would make good compost.*)
- buttered toast (*That would not make good compost.*)
- spaghetti with meatless tomato sauce (*That would make good compost.*)
- leftover salad without dressing (*That would make good compost.*)
- hot dogs (*That would not make good compost.*)
- the skins or peels from vegetables (*That would make good compost.*)



**Entering/Emerging**

Ask students *yes/no* questions about the composting process and encourage them use simple words and phrases in their writing.

**Transitioning/Expanding**

Encourage students to write more complex sentences and provide support.

**Bridging**

Challenge students to use more vivid and descriptive language in their story.

Lesson 6: Composting

# Application



**Writing:** Students will write their own story about the the steps of the composting process using pronouns and appropriate sequence words.

ELA.K.C.1.2; ELA.K.C.3.1; ELA.K.V.1.1

## MY COMPOSTING STORY



### Check for Understanding

**Recall:** What is composting? (*You start by saving certain kinds of foods, like vegetable and fruit scraps, outside in a pile or bin. The food scraps eventually turn into good soil.*)

### Show Image Cards 8–11

- Point out that some informational texts explain how things happen. The steps are described in order.
- Review the steps in the process of composting, using the Image Cards. As you show the Image Cards, use sequential vocabulary to explain the process.
- Have students turn to Activity Page 6.1.
- Explain to students that this activity page has pictures of the steps in the process of composting.
- Have students cut out the four pictures.
- Have students think about what is happening in each picture.
- Students should then arrange the pictures in the correct order to show the steps in the process.
- Ensure that students are able to correctly sequence the pictures. Ask them to talk with a partner about what is happening in the pictures, using sequence words such as *first*, *then*, *next*, and *finally* as they describe the process.
- Once students have sequenced the pictures correctly, have them glue or tape the pictures on paper.

- Pass out another piece of paper to each student.
- Explain that they will now write their own composting story and that they will be the main character.
- Tell students that when they write a story about themselves, they will be using pronouns like “I”, “me”, or “my.”
- Tell students they can look at the pictures from Activity Page 6.1 to remind them of the composting process.
- Circulate around while the students are working on their stories to provide support and feedback.
- If time allows, have students share their stories with the class.

End of Lesson

# Take-Home Material

## FAMILY LETTER

- Send home Activity Page 6.2.

Activity Page 6.2





# Pausing Point

## NOTE TO TEACHER

You should pause here and spend two days reviewing, reinforcing, or extending the material taught thus far.

You may have students do any combination of the activities listed in this section, but it is highly recommended that you use the Mid-Domain Assessment to assess students' knowledge of taking care of the earth. The other activities may be done in any order. You may wish to do one activity on successive days. You may also choose to do an activity with the whole class or with a small group of students who would benefit from the particular activity.

## CORE CONTENT OBJECTIVES UP TO THIS PAUSING POINT

Students will:

- Identify Earth and explain why people have a special responsibility to take care of the earth
- Explain what happens to garbage from its creation to being dumped in the landfill
- Identify Earth's natural resources (land, water, and air) and explain their importance
- Identify and describe the meaning of reduce, reuse, recycle
- Explain the process of recycling materials
- Identify common recyclable materials
- Identify and describe the process of composting

## MID-DOMAIN ASSESSMENT

### Sorting Recyclable Items

#### Materials: Activity Page PP.1

- Ask students if they remember the saying they learned in Lesson 5, “a place for everything and everything in its place.”
- Tell students that now they are going to practice putting things in their proper place.
- Have students turn to Activity Page PP.1.

**Directions:** There are pictures of different recycling bins on the right-hand side of the page. I will read aloud the word on each bin that explains what the bin is used for. You will be sorting recyclable items on your activity page. Draw a line from each picture on the left-hand side of the page to the bin in which the item belongs.

## ACTIVITIES

### Image Review

- Show the images from any read-aloud again, and have students retell the read-aloud using the images.

### Image Card Review

#### Materials: Image Cards 1–11

- Have students review Image Cards 1–11.
- Help students identify the image cards and brainstorm what has been learned about taking care of the earth.
- Then pass out Image Cards 1–11 to various students.
- Have students do a *Think Pair Share* for each image card.
  - For example, for the picture of sorting items for compost, a student might ask, “What items are good for composting?” or “What items are bad for composting?”

### Nouns and Verb Word Sort

**Materials:** List of nouns and verbs from the domain, additional common nouns and verbs; a set of two index cards for each student with the words “Thing or Noun” on one card and the word “Action or Verb” on the other.

- Distribute set of index cards to each student.

### Activity Page PP.1



### Image Cards 1–11



- Review the meaning of the each word on the cards. Remind students that nouns can mean a person, place, or thing.
- Tell students that you will read a word to them and they will show if it is a thing or noun by holding up the “Thing or Noun” card.
- Tell them that they can show the word is an action word or verb by holding up the “Action or Verb” card.
- Read the words and wait for the card response before reading the next word on the list.
- If time allows, have students think of their own words and share orally with the class. Have the students use their cards to indicate if the word is a noun or a verb.

### **Guest Speakers**

- Invite parents or trusted community members whose careers or volunteer work help to take care of the earth.
  - For example, you may invite someone who works at a recycling center, or someone who does litter pick-up or trash collection.
- Ask your guests to bring in any photographs or other objects that will help to show students what they do to help take care of the earth.
- You will want to share with your guest speakers, ahead of time, what you have already discussed in class so that they are better able to address students.

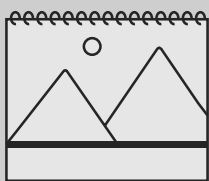
### **Natural Resources in the Classroom**

- Ask students to think about what natural resources they have learned about and then ask them to identify some natural resources that they notice are being used in the classroom.
- You may wish to guide students by explaining how cotton plants provide the material for the jeans children wear; the paper they use comes from trees; and the sandwich bags containing their lunches are made in factories by using natural resources.
- To increase awareness of our dependency on electricity, you may also have students point out all the appliances in the classroom that use electricity and the amount of time each item is in use.

### **Reduce, Reuse, Recycle!**

- Show students Flip Book image 2A-2.
- Instruct students to look closely at all the objects that have been dumped in this landfill.
- Have students think of different ways that items in this landfill could be reused.

Flip Book 2A-2



- For example, ask students what they think could be done with the bicycle parts that have been left behind.
- Encourage students to use their imaginations to create new items that people could use to reduce, reuse, and recycle the garbage in this landfill.

### **Key Vocabulary Brainstorming**

#### **Materials: Chart paper, chalkboard, or whiteboard**

- Give students a key domain concept or vocabulary word such as *recycle*.
- Have them brainstorm everything that comes to mind when they hear the word, such as *conserve*, *reduce*, etc.
- Record their responses on chart paper, chalkboard, or whiteboard for reference.

### **Informational Text**

#### **Materials: domain-related informational trade book (should have an author, illustrator, and title page.)**

- Show students the domain-related informational book you selected to read.
- Ask students to identify the front cover of the book. Ask students what kinds of things are on the front cover of a book. (*Answers may vary, including title, author, illustrator, pictures, etc.*)
- Have students turn and talk about what an author does. Then have a few pairs share their answers.
- Have students turn and talk about what an illustrator does. Have a few pairs share their answers.
- Ask students to identify the back cover of the book. Ask students what kinds of things are on the back cover of the book. (*Answers may vary, depending on book.*)
- Ask students where the title page is usually found in a book. Then, show students the title page and discuss what can be found on the page. Be sure to point out that the author and illustrator are also listed on this page.
- Read the book aloud to students. Stop from time to time to point out what the author is saying or what the illustrator has presented, making sure to use the terms *author* and *illustrator*.

### **Domain-Related Trade Book or Student Choice**

#### **Materials: Trade book**

- Read an additional trade book to review a particular concept; refer to the books listed in the Digital Components for this domain.
- You may also choose to have students select a read-aloud to be heard again.

## **Class Book: Reduce, Reuse, Recycle**

### **Materials: Drawing paper, drawing tools**

- Tell the class or a group of students that they are going to make a class book to help them remember what they have learned thus far in this domain.
- Have students brainstorm important information about the importance of taking care of the earth by reducing, reusing and recycling earth's natural resources.
- Have each student choose one idea to draw a picture of, and ask him or her to write a caption for the picture.
- Before completing the book, have students create a cover and title page, listing themselves as authors and illustrators. Remind students the about the roles of authors and illustrators, if needed.
- Bind the pages to make a book to put in the class library for students to read again and again.
- You may choose to add more pages upon completion of the entire domain before binding the book.

### **Riddles for Core Content**

- Ask students riddles such as the following to review core content:
  - We are three things that make up planet Earth. What are we? (*land, water, air*)
  - We create all the trash on the earth. Who are we? (*people*)
  - I am a dangerous place filled with garbage that gives off hazardous gases and chemicals, which can go into the land, water, and air. What am I called? (*a landfill*)
  - I am something in nature that is important to people and which they can use to make other things. What am I called? (*a natural resource*)
  - I am a natural resource that is saved when paper is reused and recycled. What am I? (*a tree*)
  - We are special containers that help you recycle paper, plastic, glass, and other items. What are we? (*recycling bins*)
  - I am decayed food that turns into good soil. What am I? (*compost*)

### **Class Recycling Center**

- Have students create a plan for a recycling center in the classroom for paper, plastic, and aluminum.
- Ask students to think about what items are needed, such as the three different recycling bins.

- Once the bins have been brought into the classroom, have students label them for the appropriate items.
- Show students the recycling symbol on the bottom of a can or bottle, and look for other items in the classroom that could be sorted into each bin.
- Have students think of the number of items they use in one day that could be recycled.
- Encourage students to think of ways they might reuse some of these items.
  - For example, plastic containers may be used to hold paint brushes or pencils; paper scraps can be reused to make a collage; etc.

### **Class Job List**

- Students have now learned many different ways that they can reduce, reuse, and recycle natural resources.
- Discuss with students possible jobs around the classroom that could contribute to taking care of the earth.
- Make a list of these jobs, and then add them to the class job list.
  - For example, items could include making sure that the water is turned off in the bathrooms; assigning a key person to turn the lights off; recycling paper; etc.
- At the end of each week, have students report back to the class on the progress of the jobs on their class list.

### **Reuse Art Fair**

**Note:** This can be done in coordination with the art teacher or can be made into a home–school connection activity.

- Have a few reuse art project options ready for students to choose to do. Some suggestions include coffee can planters, egg carton organizers, yogurt cup or plastic bottle shakers, milk carton bird houses, cereal box place mats, glass bottle picture frames, and shoebox treasure chests.
- You may wish to ask students for their suggestions as well and add those to the options.
- Once your class is finished with their reuse art projects, set up a Reuse Art Fair in your room (or another open space area in the school).

## 7

## TAKING CARE OF THE EARTH

## Pollution

## PRIMARY FOCUS OF LESSON

**Speaking and Listening**

As a way to monitor their comprehension of what they have read, students will recall facts about composting and other ways of helping to take care of the earth.

ELA.K12.EE.4.1

**Reading**

Students will recall facts about pollution and will describe possible solutions for pollution.

ELA.K12.EE.1.1; ELA.K12.EE.3.1; ELA.K12.EE.4.1

**Language**

Students will demonstrate an understanding of the Tier 2 word *toxic*.

ELA.K.V.1.1

Students will demonstrate an understanding of the multiple meaning word *litter*.

ELA.K.V.1.1

**Reading**

Students will identify key details about pollution.

ELA.K12.EE.5.1

## FORMATIVE ASSESSMENT

**Exit Pass**

**Written** Students will identify the three types of pollution.

ELA.K12.EE.5.1

## LESSON AT A GLANCE

	Grouping	Time	Materials
<b>Introducing the Read-Aloud</b>			
Know-Wonder-Learn Chart	Whole Group	10 min	<input type="checkbox"/> Know-Wonder-Learn Chart
<b>Read-Aloud</b>			
Purpose for Listening	Whole Group	30 min	
“Pollution”			
Comprehension Questions			
Word Work: <i>Toxic</i>			
<b>This is a good opportunity to take a break.</b>			
<b>Application</b>			
Multiple Meaning Word Activity	Whole Group	20 min	<input type="checkbox"/> Poster 4M: Litter <input type="checkbox"/> Know-Wonder-Learn Chart <input type="checkbox"/> index cards
Know-Wonder-Learn Chart			

## ADVANCE PREPARATION

### Note to Teacher

You may wish to remind students that Earth is the narrator in the read-aloud.

### Universal Access

- Wear the Earth Hat for the read-aloud, so it is clear to students that Earth is the narrator.



## CORE VOCABULARY

**litter, v.** to throw trash or garbage outside where it does not belong, instead of putting it in a garbage can

Example: I started to throw my candy wrapper out the car window, but my mom told me not to litter.

Variation(s): litters, littered, littering

**pollution, n.** something harmful in the air, water, or land that doesn't belong there

Example: A factory that dumps chemicals into a river creates dangerous water pollution.

Variation(s): pollutions

**smog, n.** fog mixed with smoke and other dirty things in the air; a type of air pollution

Example: The smog that floats over our city causes many health problems.

Variation(s): none

**toxic, adj.** poisonous; harmful

Example: Toxic chemicals in the river water killed many fish.

Variation(s): none

**Vocabulary Chart for “Pollution”**

Type	Tier 3 Domain-Specific Words	Tier 2 General Academic Words	Tier 1 Everyday Speech Words
Vocabulary	pollution ( <i>polución</i> ) smog	toxic ( <i>tóxico/a</i> )	
Multiple Meaning	litter		
Sayings and Phrases	water pollution fresh water waste water water treatment plant salt water		

## Lesson 7: Pollution

# Introducing the Read-Aloud



**Speaking and Listening:** As a way to monitor their comprehension of what they have read, students will recall facts about composting and other ways of helping to take care of the earth.

ELA.K12.EE.4.1

## KNOW-WONDER-LEARN CHART

- Review the Know-Wonder-Learn (KWL) Chart that you displayed earlier in this domain.
- Remind students that the KWL Chart is about the things that they know, wonder, and have learned about taking care of the earth.
- Review the 'K' and 'L' columns that were created in previous lessons.
- Ask students to tell you what else they have learned so far about taking care of the earth.
- Prior to recording students' responses under the 'L' of the KWL Chart, point out that you are going to write down what they say, but that they are not expected to read what you write because they are still learning the rules for decoding words.
  - Emphasize that you are writing what they say so that you don't forget, and tell them that you will read the chart to them.



### Check for Understanding

**Recall:** Earth is made up of three things. What are the three things? (*land, water, air*)



ENGLISH  
LANGUAGE  
LEARNERS

## Speaking and Listening

### Listening Actively

#### Entering/Emerging

Refer to the KWL chart and ask students questions to help them recall general details from the previous read-alouds.

#### Transitioning/Expanding

Ask students questions to help them recall more specific details from the previous read-alouds.

#### Bridging

Encourage students to recall details from the previous read-alouds with minimal prompting or support.

## Support

Remind students about composting. Reread small sections of the read-aloud or show images to help students recall facts and check the accuracy of their responses.

- Explain that when something harmful that does not belong on Earth is brought into the land, water, or air, it is called pollution.
  - For example, throwing trash out of the car on the ground, or littering, is a type of pollution.
- Remind students that thinking about what they know about a topic helps them monitor their comprehension as they read.
- Tell students that there are three basic types of pollution: land pollution, water pollution, and air pollution.
- Tell students that they are going to hear about the three types of pollution in this read-aloud.
- Have students think about what they may already know about pollution.
- Give students the opportunity to share anything that they already know about pollution, and record the information on the KWL chart under 'K.'
  - If a student's response includes inaccurate factual information, record it nonetheless, and acknowledge the response by saying something like, "So you think there is nothing we can do about pollution? We'll have to listen very carefully to our read-aloud and find out if that's true!"
- After writing down the details of what students know, ask students what they wonder, or want to know, about pollution.
- Record these responses under the 'W' of the KWL Chart. Ask students to keep the list of 'W' questions in mind as they listen to the upcoming read-alouds to see if they can find out some of the answers.

Lesson 7: Pollution

# Read-Aloud



**Reading:** Students will recall facts about pollution and will describe possible solutions for pollution.

ELA.K.12.EE.1.1; ELA.K.12.EE.3.1; ELA.K.12.EE.4.1

**Language:** Students will demonstrate an understanding of the Tier 2 word *toxic*.

ELA.K.V.1.1

## PURPOSE FOR LISTENING

- Tell students that today they will learn about different types of pollution.
- Tell students to listen carefully to the read-aloud to find out more about today's topic: pollution.

## "POLLUTION" (15 MIN)



### Show image 7A-1: Earth surrounded by hands

Hi, kids, Good Old Earth here again. I want to start by showing you a little art. This picture was made by an artist who wanted to make a point about how important it is to take care of the earth.

What do you think the artist is trying to get across to people? Do the three hands remind you of anything that I have told you about before? *[Pause for students to respond.]*



### Show image 7A-2: Recycling arrows on the earth with hands

Now do you remember? That's the recycling symbol, reminding you to recycle trash instead of throwing it away. This artist has taken a different approach, using hands to show that, in a way, people hold Earth in their hands. In other words, it's your responsibility to take care of me.

ReadWorks Articles

"Good Behavior in School"



## Support

Tell students that *litter* can mean other things, too. A litter is a group of animals born at the same time.



**Show image 7A-3: Clean beach, dirty beach** *How are these two pictures alike? How are they different?*

What do you notice about these two pictures? They were both taken at the beach—full of sun and sand and surf. But which beach would you rather visit if you had to choose? The trash you see in this picture is called **litter**. Litter is trash that was not put in the right place. It was left on the ground or in the water instead of in the trash can or recycling bin.



**Show image 7A-4: Litter in park**

What about this picture? It looks like it was taken in a park. There is nice, green grass, and there are woods in the background. Does this look like a fun place to play? Not with all that litter there!



**Show image 7A-5: Litter**

Litter is more than just ugly. It can also be harmful to animals, plants, and anything else that needs to live on land or in the water. Certain types of litter, like empty paint or oil cans, can leave **toxic**, or poisonous, chemicals in the ground, water, and air. And what's more, areas with a lot of litter tend to attract rats and

other undesirable pests that like to eat trash. Many of these animals will get sick from eating the litter.



**Show image 7A-6: Litter in the water**

There is a word for things that make parts of the earth dirty and hazardous. This word is **pollution**. Litter is a type of pollution. In this picture, you can see litter that has collected in a river. Now this litter has become water pollution. Litter is ugly, and it can hurt the plants and fish and other creatures that live in

and around the water. It can also make the water bad for people to drink.

I hate to see all this trash in the water, but even worse is the fact that I see lots of plastic and glass bottles. They can be recycled, but first someone has to go out in a boat and collect all this litter. It would be better if it hadn't been tossed there in the first place.



**Show image 7A-7: City smog**

*Can you see the city in this picture very well?*

I showed you some land and water pollution, which is called litter. This picture shows the effects of another kind of pollution. Can you guess what this type of pollution is called?

It's air pollution. This picture was taken during the daytime in a big American city. This city is covered in **smog**, heavy air pollution that sometimes gets so bad that it hovers or hangs around like a blanket over the entire city. Much of the smog you see here is caused by the exhaust from cars. *Exhaust is the waste that comes from the back of a car, and goes into the air.*

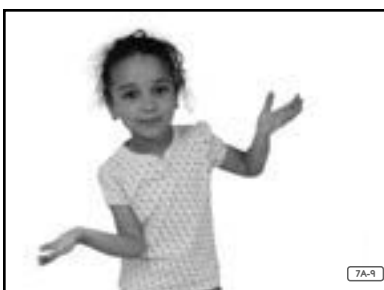


**Show image 7A-8: Factory smog**

Two of the biggest causes of air pollution are cars and factories. Look at all that smoke in the air. What do you think will happen to all that pollution? Some of it will settle for a while in the skies around the factory to form smog, but most of it will be picked up by the wind and carried to the skies over other places. Some

of it will also be carried way up into the atmosphere, the air high above the earth—up to where the airplanes fly. It can cause problems up there, too.

I'll tell you more about air pollution another day, but I just wanted to show you how yucky it can be.



**Show image 7A-9: Child shrugging**

Now I've shown you some ugly, littered places and taught you a new word: pollution. Every day people do things that create pollution. So, what can you or anyone else do about it?

I wouldn't have told you about the problem of

## Challenge

Ask students what they think a solution for pollution might be.

pollution if I didn't think there was a solution, or a way to fix it. A solution is something that fixes a problem. We need solutions for pollution!



### Show image 7A-10: Scientist

Fortunately, there are lots of people in this world who know about pollution and are finding ways to reduce it as much as possible. Every day, scientists and businesses are working to make cleaner cars and factories. And, every day, people all over the world—including kids like you—are doing what they can to pitch in and help reduce pollution. **Pitch in means to join in and help out doing something.** You are going to learn more ways to help, but I'd be willing to bet that you already have some ideas of your own.



### Check for Understanding

**Recall:** What three types of pollution did you hear about today? (*land, water, and air pollution*)

## Support

If students have difficulty responding to questions, reread pertinent lines of the read-aloud and/or refer to specific images.

### COMPREHENSION QUESTIONS (10 MIN)

1. **Literal** Which creatures on the planet cause most of the pollution? (*People cause most of the pollution.*)
2. **Inferential** The author said that littering is not a good thing. What reasons did the author give? (*Littering is a bad thing because it can be harmful to animals and plants; some litter is toxic.*)
3. **Inferential** What can happen if animals or people drink polluted water? (*If animals or people drink polluted water, then they can become sick.*)
4. **Evaluative** What kinds of problems do you think smog can cause? (*Answers may vary, but may include that smog can make birds sick, or it can make people who breathe the air sick.*)
5. **Evaluative** *Think Pair Share:* Describe one solution to pollution. (*Answers may vary, but should include support from the read-aloud. Answers may include drive less to reduce air pollution; make better factories that don't cause so much air pollution; and don't litter.*)

## WORD WORK: TOXIC (5 MIN)

1. In the read-aloud you heard, “Certain types of litter, like empty paint or oil cans, can leave toxic, or poisonous, chemicals in the ground, water, and air.”
2. Say the word *toxic* with me.
3. *Toxic* means poisonous or harmful.
4. If something is toxic, eating it or even being near it can make you sick.
5. Tell about something that you know, or that you have heard about, that is toxic. Try to use the word *toxic* when you tell about it. [Ask two or three students. If necessary, guide and/or rephrase students’ responses: “\_\_\_\_\_ is toxic because . . .”]
6. What’s the word we’ve been talking about?

**Use a Making Choices activity for follow-up.** If any of the things I say might be an example of something toxic, say, “That could be toxic.” If they are not toxic, say, “That is not toxic.”

- drinking clean water (*That is not toxic.*)
- breathing the polluted air that comes out of a factory (*That could be toxic.*)
- eating a fresh orange from a local farm (*That is not toxic.*)
- drinking polluted water from a stream that a factory dumps chemicals into (*That could be toxic.*)



### Reading

#### Exchanging Information and Ideas

##### Entering/Emerging

Reframe questions as simple yes/no questions (e.g., “Are there solutions to pollution?”).

##### Transitioning/Expanding

Provide students with a specific sentence frame (e.g., “One solution to pollution is . . .”).

##### Bridging

Encourage students to use key details in complete sentences (e.g., “One solution to pollution is to drive less to reduce air pollution.”).



Lesson 7: Pollution

# Application



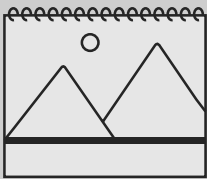
**Language:** Students will demonstrate an understanding of the multiple meaning word *litter*.

**ELA.K.V.1.1**

**Reading:** Students will identify key details about pollution.

**ELA.K12.EE.5.1**

Poster 4M



## MULTIPLE MEANING WORD ACTIVITY (5 MIN)

### Show Poster 4M: Litter

- Remind students that in the read-aloud they heard, “Litter is trash that was not put in the right place.”
- Explain that litter is trash that was thrown on the ground instead of in the trash can.
- Have students hold up one, two, or three fingers to indicate which image on the poster shows this meaning.
- Tell students that *litter* can also mean other things. *Litter* refers to a group of baby animals born at the same time.
- Have students hold up one, two, or three fingers to indicate which image on the poster shows this meaning.
- Explain that *litter* can also mean to throw trash on the ground.
- Have students hold up one, two, or three fingers to indicate which image on the poster shows this meaning.
- With a partner, have students make a sentence for each meaning of *litter*.
- Call on a few students to share their responses.
  - Remind students to try to answer in complete sentences.

## KNOW-WONDER-LEARN CHART (15 MIN)

- Review the 'K' and 'W' columns of the Know-Wonder-Learn (KWL) Chart on display.
- Ask students what they learned in the read-aloud, and record their responses in the 'L' column.
- As students respond, refer back to both the 'K' and 'W' portions of the chart to see if what they have learned relates to what was written in either the 'K' or 'W' column.
- In the event that something newly learned in the 'L' column contradicts something that was recorded in the 'K' column, this should be discussed.
  - For example, "Earlier today, when we were talking about what we knew, we said that there was nothing we could do to stop pollution. What do you think now?"
  - Then, cross out the inaccurate information in the 'K' column.



### Exit Pass

On an index card, have students identify the three types of pollution by writing, drawing, or dictating.

End of Lesson

## Support

Reread small sections of the text aloud to help students check the accuracy of their responses.



**ENGLISH  
LANGUAGE  
LEARNERS**

## Speaking and Listening

### Exchanging Information and Ideas

#### Entering/Emerging

Ask students yes/no questions about pollution and encourage them to ask their own questions about pollution.

#### Transitioning/Expanding

Encourage students to build on what the previous student has said about pollution.

#### Bridging

Challenge students to say something more about what the previous student has said about pollution.

## 8

## TAKING CARE OF THE EARTH

# Air Pollution

**PRIMARY FOCUS OF LESSON****Speaking and Listening**

As a way to monitor their comprehension of what they have read, students will discuss and recall facts about pollution.

ELA.K12.EE.4.1

**Reading**

Students will describe why air pollution is a problem and will discuss ways to reduce air pollution.

ELA.K12.EE.1.1; ELA.K12.EE.3.1; ELA.K12.EE.4.1

**Language**

Students will demonstrate an understanding of the Tier 2 word *global*.

ELA.K.V.1.1

**Reading**

Students will draw a picture illustrating a fact about air pollution.

ELA.K.C.1.4; ELA.K12.EE.5.1

**FORMATIVE ASSESSMENT****Drawing Activity**

**Drawing the Read-Aloud** Students will draw a picture, illustrating a fact about air pollution.

ELA.K.C.1.4; ELA.K12.EE.5.1

## LESSON AT A GLANCE

	Grouping	Time	Materials
<b>Introducing the Read-Aloud</b>			
What Have We Already Learned?	Whole Group	10 min	
<b>Read-Aloud</b>			
Purpose for Listening	Whole Group	30 min	
"Air Pollution"			
Comprehension Questions			
Word Work: <i>Global</i>			
<b>This is a good opportunity to take a break.</b>			
<b>Application</b>			
Drawing the Read-Aloud	Independent	20 min	<input type="checkbox"/> paper <input type="checkbox"/> drawing tools

## ADVANCE PREPARATION

### Note to Teacher

You may wish to remind students that Earth is the narrator in the read-aloud.

### Universal Access

- Wear the Earth Hat for the read-aloud, so it is clear to students that Earth is the narrator.

## CORE VOCABULARY

**appliance, n.** a piece of equipment or a machine designed to do a certain job, usually used in the home, such as a dishwasher or microwave

Example: The refrigerator is the one appliance in our apartment that my mom would like to replace.

Variation(s): appliances

**exhaust, n.** the waste that goes into the air from cars and other machines

Example: Exhaust from cars creates much of the air pollution.

Variation(s): none

**global, adj.** all over Earth; around the world

Example: Pollution is a global problem.

Variation(s): none

**Vocabulary Chart for “Air Pollution”**

Type	Tier 3 Domain-Specific Words	Tier 2 General Academic Words	Tier 1 Everyday Speech Words
Vocabulary	appliance	global ( <i>global</i> )	
Multiple Meaning	exhaust		
Sayings and Phrases	air pollution health problems		

## Lesson 8: Air Pollution

# Introducing the Read-Aloud



**Speaking and Listening:** As a way to monitor their comprehension of what they have read, students will discuss and recall facts about pollution.

ELA.K12.EE.4.1

## WHAT HAVE WE ALREADY LEARNED?

- Remind students that in the last read-aloud, they heard about different types of pollution.



### Check for Understanding

**Recall:** What are the different types of pollution? (*land, water, and air pollution*)

- Ask students to provide an example of each type of pollution.
- Tell students that, in this read-aloud, they will focus on the harmful effects of air pollution.
- Briefly discuss some of the details about air pollution from the previous lesson.
- Ask students how they think smog is harmful to the health of animals, plants, and people.
  - Repeat and expand upon each response, using richer and more complex language, including, if possible, any read-aloud vocabulary.
  - If a student's response includes inaccurate factual information, refer back to earlier read-alouds and/or illustrations to correct any misunderstandings.

## Support

Refer back to the images from Lesson 7 to remind students of examples of the different types of pollution.



ENGLISH  
LANGUAGE  
LEARNERS

## Speaking and Listening

### Exchanging Information and Ideas

#### Entering/Emerging

Ask students yes/no questions about air pollution and encourage them to ask their own questions about air pollution.

#### Transitioning/Expanding

Encourage students to build on what the previous student has said about air pollution.

#### Bridging

Challenge students to say something more about what the previous student has said about air pollution.

## Lesson 8: Air Pollution

# Read-Aloud



**Reading:** Students will describe why air pollution is a problem and will discuss ways to reduce air pollution.

ELA.K.12.EE.1.1; ELA.K.12.EE.3.1; ELA.K.12.EE.4.1

**Language:** Students will demonstrate an understanding of the Tier 2 word *global*.

ELA.K.V.1.1

### PURPOSE FOR LISTENING

- Tell students that today they will learn about ways in which air pollution is harmful and ways they can help reduce air pollution.
- Tell students to listen carefully to the read-aloud to find out more about today's topic: air pollution.

### “AIR POLLUTION” (15 MIN)



#### Show image 8A-1: Earth coughing

Good Old Earth here again. I had an artist friend of mine make this drawing. Why do you think I'm coughing in this picture? *[Give students a chance to respond.]* What is the person who draws the pictures for a story (or in this case, a read-aloud) called? (an illustrator)

Of course, I don't really need to breathe, not like you people and animals do. And I don't actually cough, either. Sometimes, though, I do wish that I could cough just to get rid of some of the air pollution that has collected in the skies.

Air pollution is a very serious problem, and it's something that affects the whole planet. Fortunately, it's a problem that can be solved. However, it's not going to be solved unless people pitch in and do their part to keep the air clean—even you can help!

### Challenge

Ask students how they think they might help to keep the air clean.



### Show image 8A-2: Lungs

*What part of the body is this?*

Air pollution can cause health problems for people. You have lungs inside your chest. This illustration shows you what lungs look like. Each time you inhale, or breathe in, your lungs fill up with air, like balloons. When you breathe out, or exhale, the air leaves your lungs. [Ask

*students to put their hands on their chests as they inhale and exhale, so that they can feel their lungs expand and deflate.]*

If there is pollution in the air you breathe, then each time you inhale, that pollution enters your lungs. Over time, this can cause health problems. The more polluted the air, the more pollution you breathe in. And the fact is, dirty, polluted air is bad for people's lungs and can make them sick.



### Show image 8A-3: Aerial view of a city with smog

Here's a picture of a big American city. Let's take a close look at it. If you look at the background, where there are large buildings, you can see that the air looks kind of foggy and clouded. Look even closer, beyond the city, and you can see a thin brownish-yellow strip

of air, just below the light-blue sky. That's air pollution, or smog, which floats over the top of the city.



### Show image 8A-4: Upper atmosphere

Air pollution creates **global** problems. That means that smog and other forms of air pollution can cause problems all over Earth, or, as some people call me, the globe. In other words, the places that create a lot of air pollution, such as big cities with lots of cars and factories, are not the only places that are

harmed, or hurt, by air pollution. Air pollution is carried by the wind to other places. It also floats up high into the atmosphere, higher than the highest airplanes. But it doesn't float off into space. Instead, it collects up in the sky.

Luckily, there is a lot that you can do in your home, school, and town to help solve the problem of air pollution. And here comes another big 'R'



## Support

Remind students that a responsibility is something that a person is expected to do.

word: *responsibility*. That's right, if people want to make sure that the air is clean, then it's their responsibility to learn how they can help. *What is a responsibility?*



### Show image 8A-5: Electrical outlet and light switch

One of the most amazing things about people is that you have figured out how to make and use electricity. You use it for so many things, including light bulbs, which you turn on and off with light switches. Televisions, refrigerators, air conditioners, computers, and so much

more, are also plugged into electrical outlets. *[Point to the electrical outlet in the picture.]*

You might have heard that too much television is bad for your brain, but I bet you didn't know that it's bad for the air, too! Why? Because when you watch TV, you use electricity, and using electricity can add to air pollution, even though you can't see anything going into the air.



### Show image 8A-6: Coal train

What do you see in this picture? *[Pause for students to respond.]* First of all, it's a really long train. What is the train carrying? It's carrying one of the most important natural resources in the world—coal. *Do you remember that we learned about mining coal when we read about blacksmiths?* Coal is a type of

rock that people dig up out of the earth. In some places, people burn coal to produce, or make, energy.



### Show image 8A-7: Coal plant

Energy from burning coal can be used to make electricity. This is a picture of a coal-fired power plant. *A coal-fired power plant is a factory that uses coal to make electricity.* But coal-fired power plants can generate large amounts of air pollution.

Do you see the electrical lines running out from this plant in the lower right corner of the picture? *[If possible, tell students what*

*type of power is used in your community.]* Every time someone turns on a light, a computer, or any other electrical **appliance** or *household machine*, there's a chance that the electricity is coming from a power plant like this one and, as a result, a little more pollution is added to the air. But, when you turn off the lights, you do not add any pollution. It's a simple thing everyone can do to help reduce air pollution! *So when you leave the room for a while, what should you do on your way out?*



### Show image 8A-8: Car tailpipe

Do you know what this is? *[Pause for students to respond.]* This is the tailpipe of a car. And it is another big cause of air pollution. Every time someone starts a car, that car lets air pollution out of the engine through the tailpipe. The pollution that comes out of the tailpipe is called **exhaust**.

So, what exactly is car exhaust, and how does it pollute the air?



### Show image 8A-9: Pumping gas

What's this person doing? *[Pause for students to respond.]* He's pumping gas into his car at a gas station. Gasoline is extremely useful. People use it in their cars, trucks, buses, boats, airplanes, and lawn mowers. Every day, people around the world use millions and millions of gallons of gasoline.



### Show image 8A-10: Traffic jam

A car's engine burns gasoline, which gives it power. When a driver "steps on the gas," he or she presses down the gas pedal, which is on the floor of the car. That sends more gasoline to the car engine and makes the car go. But, when gasoline burns—like coal—it creates air pollution. With millions of cars driving around

letting out exhaust, the pollution really starts to add up. The more cars, and the bigger those cars are, the more air pollution they create.

That's why it's always a good idea to walk, ride your bike, or take the bus when you can. All this helps reduce the amount of air pollution.



### Check for Understanding

**Recall:** Why is it important to know about air pollution? (*It is important because air pollution is a global problem that can make people sick.*)

### Support

If students have difficulty responding to questions, reread pertinent lines of the read-aloud and/or refer to specific images.

ENGLISH  
LANGUAGE  
LEARNERS



### Reading

Exchanging Information  
and Ideas

#### Entering/Emerging

Reframe questions as simple yes/no questions (e.g., "Can people reduce air pollution?").

#### Transitioning/Expanding

Provide students with a specific sentence frame (e.g., "One way to reduce air pollution is . . .").

#### Bridging

Encourage students to use key details in complete sentences (e.g., "One way to reduce air pollution is to walk or ride a bike instead of riding in a car.").

### COMPREHENSION QUESTIONS (10 MIN)

- Inferential** How does air pollution affect your lungs? (*If you breathe in dirty air, it gets into your lungs and can make you sick.*)
  - Literal** What part of your body do you breathe with? (*You breathe with lungs.*)
- Inferential** How is car exhaust bad for the earth? (*Car exhaust is bad for the earth because it causes air pollution.*)
  - Literal** What do you call the waste that comes out of the tailpipe of a car? (*Exhaust is the waste that comes out of the tailpipe of a car.*)
- Inferential** Why can watching too much television be bad for the air? (*When you watch television, it uses electricity. If that electricity is made from burning fuel, like coal, it can cause air pollution.*)
- Literal** The author says that air pollution is a global problem all around the world, not just in the place where the air pollution occurs. What reason does the author give? (*Air pollution is a global problem because wind blows dirty air from big cities to other places in the world.*)
- Evaluative** *Think Pair Share:* What can you do to reduce air pollution? (*Answers may vary, but should include support from the read-aloud. Answers may include use less electricity; and walk or ride a bike instead of riding in a car.*)
- Evaluative** What ideas does the author give to people so they don't drive their cars so much, which causes air pollution? (*They can choose to walk, bike, and live closer to their work and school.*)

## WORD WORK: GLOBAL (5 MIN)

1. In the read-aloud you heard, “Air pollution creates global problems.”
2. Say the word *global* with me.
3. *Global* means all over Earth or around the world.
4. Because air pollution creates global problems, people all over the world should do what they can to reduce it.
5. Tell about something else that might be global. Are there other things that happen to people all around the world? Try to use the word *global* when you tell about it. [Ask two or three students. If necessary, guide and/or rephrase students’ responses: “\_\_\_\_\_ is global because . . .”]
6. What’s the word we’ve been talking about?

**Use a Making Choices activity for follow-up.** If any of the things I say are examples of something global, say, “That is global.” If any of the things I say are not examples of something global, say, “That is not global.”

- A cat got stuck in a tree in my neighborhood. (*That is not global.*)
- The wind carries smog and air pollution all over the world. (*That is global.*)
- My family goes to the market down the street to buy groceries. (*That is not global.*)
- People use electricity in every part of the world. (*That is global.*)
- All of the people on Earth need to breathe clean air. (*That is global.*)



Writing

Writing

**Entering/Emerging**

Have students use phrases and familiar vocabulary to describe their drawing.

**Transitioning/Expanding**

Have students describe their drawing using short sentence(s).

**Bridging**

Have students describe their drawing using longer, more detailed sentence(s).

**Support**

If students struggle to decide what to draw, then select a subject for them, such as a car's exhaust polluting the air, a city with smog covering it, or a person riding a bike instead of driving a car to reduce air pollution.

**Challenge**

Have students add labels to their drawings.

Lesson 8: Air Pollution

# Application



**Reading:** Students will draw a picture illustrating a fact about air pollution.

ELA.K.C.1.4; ELA.K.12.EE.5.1

**DRAWING THE READ-ALOUD**



**Check for Understanding**

**Recall:** What did you learn about air pollution from today's read-aloud? (*Answers may vary, but may include that air pollution is harmful to the earth and people; air pollution is caused by lots of things, like factories, cars, and electricity; pollution gets into the air and can be spread all over the world by the wind; when people breathe dirty air into their lungs, they can get sick; there are ways to reduce air pollution.*)

- Have students draw a picture of one thing they learned about air pollution from the read-aloud. Encourage students to draw something that creates air pollution or something that helps reduce air pollution.
- As students complete their drawings, circulate around the room and ask them to discuss their drawings.
- Repeat and expand upon students' responses, using richer and more complex language, including, if possible, any read-aloud vocabulary.
- As time allows, have students present their drawings to the class, discussing what they learned from the read-aloud.

## TAKING CARE OF THE EARTH

# Willy the Water Drop

**PRIMARY FOCUS OF LESSON****Speaking and Listening**

Students will identify the three basic types of water.

ELA.K.12.EE.4.1

**Reading**

Students will differentiate between freshwater and wastewater and will explain why having clean water is important.

ELA.K.V.1.1; ELA.K.12.EE.1.1; ELA.K.12.EE.3.1; ELA.K.12.EE.4.1

**Language**

Students will demonstrate an understanding of the Tier 2 word *supply*.

ELA.K.V.1.1

**Writing**

Students will demonstrate an understanding of the different types of water during a shared writing activity that involves the use of technology and an application of English conventions.

ELA.K.C.1.2; ELA.K.C.1.5; ELA.K.C.3.1; ELA.K.C.5.1

**FORMATIVE ASSESSMENT****Writing Activity**

**Willy the Water Drop Story** Students will participate in a group writing activity using technology to write and illustrate the story.

ELA.K.C.1.2; ELA.K.C.1.5; ELA.K.C.3.1; ELA.K.C.5.1

## LESSON AT A GLANCE

	Grouping	Time	Materials
<b>Introducing the Read-Aloud</b>			
Essential Background Information or Terms	Whole Group	10 min	
<b>Read-Aloud</b>			
Purpose for Listening	Whole Group	30 min	
“Willy the Water Drop”			
Comprehension Questions			
Word Work: <i>Supply</i>			
<b>This is a good opportunity to take a break.</b>			
<b>Application</b>			
Willy the Water Drop Story	Whole Group	20 min	<input type="checkbox"/> paper <input type="checkbox"/> drawing tools <input type="checkbox"/> computer and projector <input type="checkbox"/> PowerPoint (or comparable program) <input type="checkbox"/> online access

## ADVANCE PREPARATION

The technology-based Application lesson requires use of PowerPoint (or comparable program), access to online images about the water cycle (it may be helpful to find some in advance), and a projector to show the PowerPoint and online images.

### Note to Teacher

You may wish to remind students that Earth is the narrator in the read-aloud.

## Universal Access

- Wear the Earth Hat for the read-aloud, so it is clear to students that Earth is the narrator.

### CORE VOCABULARY

**evaporate, v.** to turn from a liquid into a gas

Example: The water drops on the leaves will evaporate into the air by late morning.

Variation(s): evaporates, evaporated, evaporating

**pollutants, n.** harmful things that make the air, land, or water dirty

Example: Some water pollutants include waste from factories, sewers, and garbage.

Variation(s): pollutant

**reservoirs, n.** places where water is collected and stored for use

Example: Many cities have reservoirs to store water.

Variations: reservoir

**supply, n.** the amount of something that is available for use

Example: The supply of crayons is enough for the entire class.

Variation(s): supplies

### Vocabulary Chart for “Willy the Water Drop”

Type	Tier 3 Domain-Specific Words	Tier 2 General Academic Words	Tier 1 Everyday Speech Words
Vocabulary	evaporate ( <i>evaporarse</i> ) pollutants reservoirs	supply	
Multiple Meaning			
Sayings and Phrases			



## Lesson 9: Willy the Water Drop

# Introducing the Read-Aloud



**Speaking and Listening:** Students will identify the three basic types of water.

ELA.K12.EE.4.1

## ESSENTIAL BACKGROUND INFORMATION OR TERMS

- Explain to students that in the next read-aloud, they will hear about the journey of a water drop named Willy.
- Tell students that water drops don't really have names and that Willy is a make-believe character.



### Check for Understanding

**Recall:** What is a character? (*A character is a person, animal, or thing that a story is about.*)

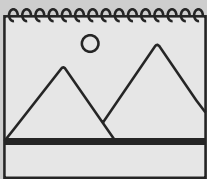
What does it mean if a character is make-believe? (*If a character is make-believe, then it means that it is not real.*)

- Explain that Willy's travels are similar to those that real water drops take.
- Tell students that as Willy travels from place to place, he turns into different types of water.
- Explain that the three basic types of water are freshwater, salt water, and wastewater.

### Show image 9A-1: Three-pane image of freshwater, salt water, and wastewater

- Ask students what they think freshwater is.
- Tell students that freshwater is clean water.
- Ask students what they think salt water is.

Flip Book 9A-1



- Tell students that salt water is salty water from the ocean or sea.
- Ask students what they think wastewater is.
- Tell students that wastewater is water that is no longer clean because it has been used by people to wash or flush away materials such as dirt and chemicals.
- Ask students which basic form of water they think is safe to drink and which is not safe to drink.
- Explain that freshwater is safe for people to drink, but we cannot drink salt water. Explain that drinking wastewater can cause animals and humans to become very sick.



### Check for Understanding

**Recall:** What are the three basic types of water? (*freshwater, salt water, and wastewater*)

- Explain that the presence of toxic wastewater is one reason why we need water treatment plants.
- Tell students that a water treatment plant is a place that cleans dirty water.
- Tell students that they will hear about Willy's journey to different places, including a water treatment plant, where Willy will be cleaned and made ready to continue on his travels.



**ENGLISH  
LANGUAGE  
LEARNERS**

### Speaking and Listening

#### Exchanging Information and Ideas

#### Entering/Emerging

Ask students yes/no questions about the three types of water and encourage them to ask their own questions about the three forms of water.

#### Transitioning/Expanding

Encourage students to build on what the previous student has said about the three types of water.

#### Bridging

Challenge students to say something more about what the previous student has said about the three types of water.

## Lesson 9: Willy the Water Drop

# Read-Aloud



**Reading:** Students will differentiate between freshwater and wastewater and will explain why having clean water is important.

ELA.K.V.1.1; ELA.K12.EE.1.1; ELA.K12.EE.3.1; ELA.K12.EE.4.1

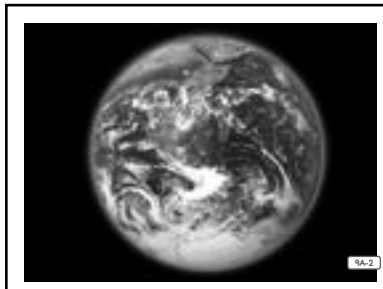
**Language:** Students will demonstrate an understanding of the Tier 2 word *supply*.

ELA.K.V.1.1

### PURPOSE FOR LISTENING

- Tell students to listen for the different places that Willy goes on his journey as a little drop of water.

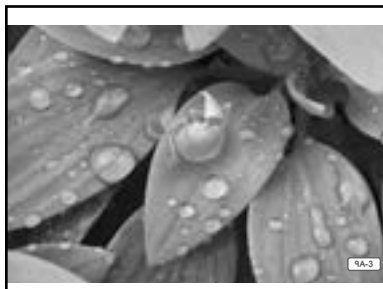
### “WILLY THE WATER DROP” (15 MIN)



#### Show image 9A-2: Earth photo showing lots of water

Water is one of the most important natural resources on Earth. No matter who you are, what you do, or where you live, you'll always need plenty of water. Luckily, I have a lot of water on my surface. *Remember, there is more water than land on the surface of the earth.* But

I'm here to tell you that you need to help take care of the water if you want to help make sure that Earth is always a happy, healthy place to live.



#### Show image 9A-3: Water drops on leaves

Water is such an important natural resource that I decided to tell you a story about a special little drop of water that I named Willy. I found Willy a few weeks ago resting on this leaf with a bunch of other water drops. *A drop is a small, rounded amount of water.*

### Support

Explain that the word *drop* has other meanings. *Drop* also means to fall.

Yes, Willy is just one little drop of water—not much compared to all the water there is on Earth. But you should know that every single drop of water is important, especially freshwater like Willy. Freshwater is what you need when you're thirsty, or when you need to take a bath, or for any of the thousand other things you use water for. It's very precious, and less than one percent of the water on my surface is fresh! *One percent means that for every one hundred drops of water, only one drop is freshwater.*

You might be surprised to learn that Willy the Water Drop is actually a very busy fellow. Like most water drops, he is always on the move. I decided to follow Willy and see what happened to him after he landed on this leaf.



**Show image 9A-4: Littered river**

Willy wasn't on the leaf for long. A breeze came along and shook the leaf, sending Willy into this winding river. I wondered what would happen to Willy when he washed through all the litter in this river. Sure enough, he picked up a little dirt and grime along the way. *Willy used to be freshwater, but do you see how easily he becomes dirty?*



**Show image 9A-5: Factory on a river**

Later, Willy the Water Drop passed a big factory. People produce many different things in factories. Unfortunately, almost all factories produce wastewater. *Wastewater is water that is no longer clean because it has been used by people to wash or flush materials such as dirt and chemicals.* Whatever they're making inside

the factory—whether they're mixing paint, or making ink, or mopping the floors at the end of the day—people are using water. That dirty water needs to go somewhere when they're done with it.

Wastewater is the dirty water that comes out of factories like this one. But it doesn't go to the landfill like the trash from your kitchen. Instead, it goes down the drain and sometimes ends up back in a river or other body of water.



**Show image 9A-6: Wastewater pipe** *What do you think is coming out of this pipe?*

Willy went past this wastewater pipe on the other side of the factory. Trust me, you don't even want to know what was coming out of this pipe. This pipe, and many others like it, can pollute the freshwater **supply**. *Supply means the amount of something available for use. The*

*freshwater supply is the amount of freshwater available to all the creatures on Earth.*

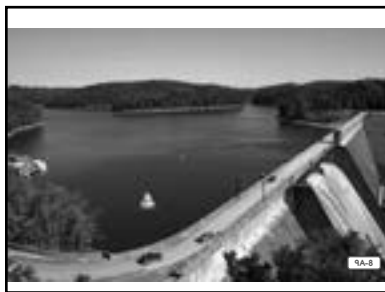
What's the water supply? That's pretty much the whole point of this story. Willy the Water Drop is part of the freshwater supply—or at least he was when he first started out on the leaf. You, and all the creatures and plants on Earth, depend on the freshwater supply. There's plenty for everyone as long as everyone is careful not to use too much or pollute it.



**Show image 9A-7: Fish**

One morning in the river, Willy passed through a trout's gills. Remember how you learned that polluted air is bad for your lungs? Well, polluted water is bad for a fish's gills, too. When this fish swam by, Willy the Water Drop passed right through its gills. Any **pollutants**, or dirty harmful things, that Willy picked up

when he passed the litter or wastewater pipe could have been left inside this fish. That's not good for the fish!



**Show image 9A-8: Water reservoir**

Many cities get their water from **reservoirs**. And this is exactly where Willy the Water Drop ended up after a week or so in the river. A reservoir is a place made by people to collect and store water. Reservoirs are created by building a dam, like the one in this picture, across a river. By damming the river, people are able to make a big lake.



**Show image 9A-9: Water treatment plant**

After Willy the Water Drop floated around in the reservoir for a few days, he went down a pipe and into this water treatment plant. This is like a big bathtub, only here they are actually cleaning water instead of using water to clean something else. After Willy sat in this treatment plant for a while, and the people

were sure that he didn't have any more pollutants or other dirty stuff in him, he was ready to go through the pipes to someone's home.



**Show image 9A-10: Child washing hands**

Once he left the treatment plant, Willy went into another pipe, and then another and another, until finally he ended up flowing out of someone's bathroom faucet. A boy was washing his hands before dinner. That's a good thing, because there were all sorts of germs on that boy's hands. This is why Willy likes being

a water drop: he knows he's helping boys and girls grow up to be healthy and clean.



**Show image 9A-11: Drain**

*Where is Willy going now?*

Willy the Water Drop was happy to have helped the boy get ready for dinner, but then it was straight down the drain for Willy! He went down the sink drain and into the drainpipe.

Do you think that was the end of Willy the Water Drop? Is that the last we'll ever see of him? Actually, the answer is no. Willy will be back again. Right now, he could be in a wastewater pipe, or floating around in a reservoir. However, there's really no telling exactly where he'll end up.

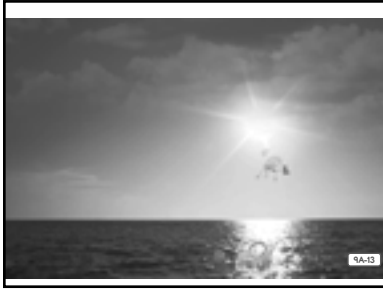
**Challenge**

Ask students which form of water is in reservoirs: freshwater or wastewater.



**Show image 9A-12: Treated water coming out of a pipe**

Hopefully, Willy will go through another water treatment plant so they can clean off all the dirt and pollution before he is washed out of a big pipe like this and into another river.



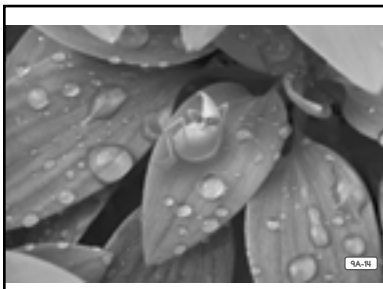
**Show image 9A-13: Sunny ocean**

Once he's back in the river, Willy could flow to another reservoir. He could flow to the ocean. Maybe a bird will drink him! Or, maybe Willy will wind up in a sunny spot like this. The heat from the sun will make him **evaporate**, turning him into water vapor. Instead of being a water drop, he'll be part of the air for a while. He'll

float up into the sky, and there he could become part of a cloud.

You heard it right! Clouds are actually fluffy bundles of tiny little water droplets up in the sky. The water in clouds was once part of a river or lake or stream on the surface of the earth.

Once he becomes part of the clouds again, Willy the Water Drop will float across the sky until, one morning . . .



**Show image 9A-14: Water drops on a leaf**

It will rain, and there you'll find Willy, sitting on a leaf waiting to start his journey all over again. Perhaps he'll end up in a bathtub or swimming pool near you!



**Check for Understanding**

**One-Word Answer:** Which important natural resource did Good Old Earth tell you about in this read-aloud? (*water*)

## COMPREHENSION QUESTIONS (10 MIN)

### Show image 9A-1: Three-pane image of freshwater, salt water, and wastewater

1. **Inferential** What is the difference between freshwater and wastewater? *(Answers may vary, but may include that you can drink freshwater, but you can't drink wastewater; freshwater is clean water, and wastewater is dirty and could make you sick if you drink it.)*
2. **Inferential** Where does wastewater come from? *(Wastewater comes from factories and people's homes.)*
3. **Literal** Why are water treatment plants important? *(Water treatment plants are important because they turn dirty water into clean water so we can use it again.)*
4. **Literal** What are clouds made of? *(Clouds are made of water droplets.)*
5. **Evaluative** *Think Pair Share:* Is it important to have clean water drops like Willy? Why or why not? *(Answers may vary, but should include support from the read-aloud. Answers may include that it is important to have clean water drops, because we need clean water to drink, take baths in, and wash our clothes.)*

## WORD WORK: SUPPLY (5 MIN)

1. In the read-aloud you heard, "This pipe, and many others like it, can pollute the freshwater supply."
2. Say the word *supply* with me.
3. *Supply* means the amount of something that is available for use.
4. Before the storm, we got a supply of food and water to keep at home.
5. Tell about something that you have a supply of at home or at school. Try to use the word *supply* when you tell about it. [Ask two or three students. If necessary, guide and/or rephrase students' responses: "We have a supply of \_\_\_\_\_ at home/school for . . ."]
6. What's the word we've been talking about?

## Support

If students have difficulty responding to questions, reread pertinent lines of the read-aloud and/or refer to specific images.



ENGLISH  
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## Reading

### Offering Opinions

#### Entering/Emerging

Provide students sentence frames using a small set of learned phrases (e.g., "It is important to have clean water because . . .").

#### Transitioning/Expanding

Provide students sentence frames using an expanded set of learned phrases (e.g., "I think it is important to have clean water drops like Willy because . . .").

#### Bridging

Provide minimal support and guidance for open responses.



**Use a Making Choices activity for follow-up.** If any of the things I describe are examples of a supply of certain items or materials, say, “That is a supply.” If the things I say are not examples of a supply of items, say, “That is not a supply.”

- Everyone brings in a box of tissues at the beginning of the school year so that there are plenty to use. (*That is a supply.*)
- My dad got me a big box of pencils to last me the whole school year. (*That is a supply.*)
- We bring in our own snacks each day. (*That is not a supply.*)
- We had hamburgers for dinner last night. (*That is not a supply.*)
- The water in the reservoir is enough for the whole town. (*That is a supply.*)

**Note:** If you have a supply of items in your classroom, take this opportunity to show students your supply (e.g., paper, tissues, markers, etc.). If students each have their own supply of items, you may want to refer to that now, too.

## Lesson 9: Willy the Water Drop

# Application



**Writing:** Students will demonstrate an understanding of the different types of water during a shared writing activity that involves the use of technology and an application of English conventions.

ELA.K.C.1.2; ELA.K.C.1.5; ELA.K.C.3.1; ELA.K.C.5.1

### WILLY THE WATER DROP STORY (20 MIN)



#### Check for Understanding

**Recall:** What is freshwater? (*Freshwater is clean water that people can drink.*)

What is wastewater? (*Wastewater is dirty water that is not safe to drink.*)

- See Advanced Preparation section of the lesson for details. This technology-based lesson requires use of PowerPoint (or comparable program), access to the online images about the water cycle (it may be helpful to find some in advance) and a projector to show the PowerPoint slides as they are created and the online images.
- Students will help to choose the words and images to go on the slides. You will need to use the copy-and-paste method or screen grab method available on your computer to capture the images to paste onto the slide.
- Tell students that you will be rewriting the story of Willy the Water Drop and you will include 4 places that he will travel and what will happen to him when he goes there.
- Project PowerPoint and tell students that they will all be helping to write the story. Explain that you will be typing the words for them. (It would be helpful to create a title page slide ahead of time.)

#### Support

Provide prompting and reread portions of the Read-Aloud, if needed.



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#### Writing

##### Writing

##### Entering/Emerging

Have students use phrases and familiar vocabulary to describe their drawing.

##### Transitioning/Expanding

Have students describe their drawing using short sentence(s).

##### Bridging

Have students describe their drawing using longer, more detailed sentence(s).

- Have a brief discussion about where Willy the Water Drop is when the story first starts begins. You may have a class vote, but do not spend a great deal of time deciding. Type a sentence on the slide to show where Willy is. Leave room on each slide to add an image later in the lesson.
- Now discuss with the students where Willy should go next. What would happen to Willy in the next place? Tell students to use information they heard from the Read-Aloud to help them decide. Type the name of the next place and what happens to Willy on this slide.
- Continue in this way until Willy has been to three different places. (Willy moves and passes through all sorts of places, such as a river, a factory, a fish's gills, a reservoir, a water treatment plant, a bathroom faucet.)
- Tell students that writers need to edit their drafts to see whether they can make their writing better. Read through the shared text with them, asking them to look for errors in spelling, grammar, and punctuation. Ask them whether they are happy with the word choices or whether they want to add or change any words. Make changes as needed and then reread the text with students.
- Next, tell students that it's time to add images to each of the slides. It would be helpful to have some images already chosen for them to choose from. After a brief discussion, add the images the class chose to the slides using a copy-and-paste or screen grab tool on your computer.
- When the story is complete, show the entire presentation to the class, reading each slide aloud.

**Note:** If you do not have access to technology for this lesson, modify it by using chart paper to create the story and have a discussion about which images would work best with each place that Willy goes.

- To close the lesson, have students each draw a picture of Willy the Water Drop in one of the locations you discussed and write a sentence describing it.

~~~~~  
End of Lesson  
~~~~~

## TAKING CARE OF THE EARTH

# Good-bye from Good Old Earth

**PRIMARY FOCUS OF LESSON****Speaking and Listening**

Students will recall facts about air and water pollution.

ELA.K.12.EE.4.1

**Reading**

Students will describe different ways that they can help take care of the earth.

ELA.K.V.1.1; ELA.K.12.EE.4.1

**Language**

Students will demonstrate an understanding of the Tier 2 word *effort*.

ELA.K.V.1.1

**Writing**

Students will take part in the creation of a class book by contributing a drawing and a piece of writing about taking care of the earth.

ELA.K.C.1.4; ELA.K.C.1.5; ELA.K.V.1.1

**FORMATIVE ASSESSMENT****Class Book**

**Reduce, Reuse, Recycle** Students will take part in the creation of a class book by contributing a drawing and a piece of writing about taking care of the earth.

ELA.K.C.1.4; ELA.K.V.1.1

## LESSON AT A GLANCE

	Grouping	Time	Materials
<b>Introducing the Read-Aloud</b>			
Know-Wonder-Learn Chart	Whole Group	10 min	<input type="checkbox"/> Know-Wonder-Learn Chart
<b>Read-Aloud</b>			
Purpose for Listening	Whole Group	30 min	
“Good-bye from Good Old Earth”			
Comprehension Questions			
Word Work: <i>Effort</i>			
<b>This is a good opportunity to take a break.</b>			
<b>Application</b>			
Brainstorming Links	Whole Group Independent	20 min	<input type="checkbox"/> Know-Wonder-Learn Chart <input type="checkbox"/> paper <input type="checkbox"/> drawing tools
Class Book: Reduce, Reuse, Recycle			

## ADVANCE PREPARATION

### Note to Teacher

You may wish to remind students that Earth is the narrator in the read-aloud.

### Universal Access

- Wear the Earth Hat for the read-aloud, so it is clear to students that Earth is the narrator.

## CORE VOCABULARY

**carpool, v.** to travel in a car with other people, sharing the costs and often taking turns as the driver

Example: My father and our neighbor carpool to work to save on gas.

Variation(s): carpools, carpooled, carpooling

**effort, n.** a try at something, especially when it is hard

Example: Recycling takes time and effort, but helps to save Earth's natural resources.

Variation(s): efforts

**organize, v.** to plan an activity

Example: We can organize a bake sale and donate the money to our school.

Variation(s): organizes, organized, organizing

**Vocabulary Chart for "Good-bye from Good Old Earth"**

Type	Tier 3 Domain-Specific Words	Tier 2 General Academic Words	Tier 1 Everyday Speech Words
Vocabulary	carpool	effort	
Multiple Meaning		organize ( <i>organizar</i> )	
Sayings and Phrases	spread the word(s)		

## Lesson 10: Good-bye from Good Old Earth

# Introducing the Read-Aloud



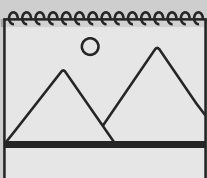
**Speaking and Listening:** Students will recall facts about air and water pollution.

ELA.K12.EE.4.1

## KNOW-WONDER-LEARN CHART

- Refer to the Know-Wonder-Learn (KWL) Chart on display.
- Remind students that the KWL Chart is about the things that they know, wonder, and have learned about taking care of the earth.
- Review the 'K' and 'L' columns that were created earlier, emphasizing in particular the topics related to recycling.
- Talk about what is listed in the 'L' column of the chart to provide a quick review of what students have already learned over the course of this domain about taking care of the earth.
- As students respond, refer back to both the 'K' and 'W' portions of the chart to see if what they have learned relates to what was written in the 'K' or 'W' columns.
- In the event that something learned in the 'L' column contradicts something that was recorded earlier in the 'K' column, this should be discussed.
  - For example, you may say, "When we were talking about what we knew, we said that there was nothing we could do to help stop pollution. What do you think now?"
  - Then, cross out the inaccurate information in the 'K' column.
- Tell students that they have heard two additional read-alouds since you last worked on the KWL Chart.
- Explain that you are going to show them a picture or two from each of those read-alouds (Lessons 8 and 9) to help them remember some things they learned in those read-alouds.
- After showing each set of images and discussing them, assist students in articulating new ideas that they have learned, and then add those ideas to the 'L' column of the chart.
- Remind students that they listened to a read-aloud about air pollution.

Flip Book 8A-3,  
8A-2, 9A-3, 9A-6



### **Show image 8A-3 (view of city with smog)**

- Ask students to describe what they see in this picture.
- Ask students to try to remember some of the things that create air pollution.

### **Show them image 8A-2 (lungs)**

- Ask if students remember what this is and why air pollution is harmful.
- Remind students that they heard a read-aloud about Willy the Water Drop.

### **Show image 9A-3 (water drops on leaves)**

- Remind students that Willy started out as clean, fresh water.

### **Show image 9A-6 (wastewater pipe)**

- Ask students if they remember what was coming out of this pipe.
- Ask students what happened to Willy after traveling through this pipe.
- Ask students why polluted water is harmful.



**ENGLISH  
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## Speaking and Listening

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### Listening Actively

#### **Entering/Emerging**

Refer to the KWL chart and ask students questions to help them recall general details from the previous read-alouds.

#### **Transitioning/Expanding**

Ask students questions to help them recall more specific details from the previous read-alouds.

#### **Bridging**

Encourage students to recall details from the previous read-alouds with minimal prompting or support.



## Lesson 10: Good-bye from Good Old Earth

# Read-Aloud



**Reading:** Students will describe different ways that they can help take care of the earth.

ELA.K.V.1.1; ELA.K12.EE.4.1

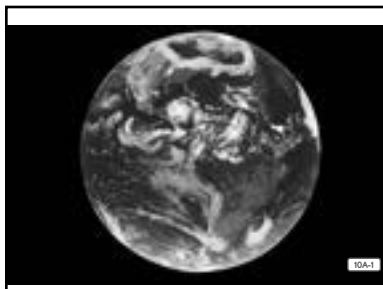
**Language:** Students will demonstrate an understanding of the Tier 2 word *effort*.

ELA.K.V.1.1

### PURPOSE FOR LISTENING

- Tell students that today's read-aloud is the last read-aloud about taking care of the earth.
- Ask students to listen carefully as Good Old Earth gives them some last suggestions about how they can help to take care of their planet.
- Tell students to try to remember the different things that Earth says they can do to help solve the earth's problems.

### "GOOD-BYE FROM GOOD OLD EARTH" (15 MIN)



#### Show image 10A-1: A parting shot of Earth

Well, this is probably the last time you'll see a picture like this of Good Old Earth, at least for a while. Of course, it's not the last time you'll see me at all! You see me—or at least part of me—every time you open your eyes.

Before I say good-bye, I want to share a few interesting things with you. Listen closely, and you will learn some amazing things that you and other people can do to take care of me.

Remember: It's important that everyone do his or her part. If every person accepts the responsibility to do a few little things, then these little things will start to add up to many big things!

So, pitch in! Think about what I've taught you, and spread the words *reduce*, *reuse*, and *recycle*—tell your friends and families that they need to help take

### Support

Remind students that a responsibility is something that a person is expected to do.

care of the earth, too. Don't litter, and if you see a place where other people have littered, ask an adult to help you **organize** a litter pick-up. *Don't throw trash out where it doesn't belong. And if you see a place where other people have thrown their garbage out on the ground or in a lake or river, ask a grown-up to help you plan a way to clean up that area.* You and your family can also make sure you recycle paper, cans, cardboard boxes, glass, and that plastic that you use, or even start a compost pile with your leftover scraps so less trash goes to the landfills.



**Show image 10A-2: Recycling bin** *What symbol do you see on this bin?*

Set up recycling bins in your home and school. Make a plan to get the materials from the bin to the recycling center. And stick to your plan! If you collect a lot of recyclable materials but never bother to take them to the recycling center, you've only taken the first important

step necessary in recycling.

If you want to make sure that the recycling goes where it needs to go, then make it your responsibility to take care of it. Make sure that everything is properly sorted and out on the curb when the recycling truck comes. If your neighborhood doesn't have a recycling service, find out where your closest recycling center is. Then, work with a parent or another relative with a car to set up one or two days each month when you will take a trip to drop everything off at the recycling center.



**Show image 10A-3: Family riding bikes** *Tell me what you see in this picture.*

Another thing you can do is try to use your cars a little less. People are good walkers, and cars aren't the only things with wheels. Instead of getting a ride to a place that's just around the corner, maybe you can walk or ride a bicycle. That way you won't burn any gasoline,

and you don't put any pollution into the air. Plus, the exercise is good for you. Of course, if people live close to the places they often need to get to, that helps them drive their cars a lot less, too.

If you, or your parents, absolutely have to ride or drive, find out if there's any way you can **carpool** with someone else. Carpooling is when two or more

### Challenge

Ask students if they can think of why riding a bike might be better for the earth than driving a car.

people ride in a car together to the same place. Do you understand how this reduces air pollution? If four people ride together to the playground, the store, or school as part of a carpool, that means only one car engine is burning gasoline instead of four engines.



**Show image 10A-4: Bus** *What is this a picture of? How many people could ride in it at one time?*

Or, encourage your family to use the bus or train if you live in a city or town where they are available. Buses are a great way to get lots of people to where they need to go and to reduce the number of cars on the road. Anything you can do to reduce the number of cars on the

road will also reduce the amount of pollution in the air.

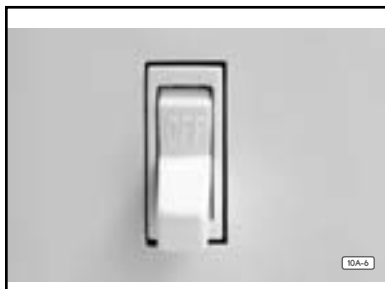


**Show image 10A-5: Child planting tree**

Another simple thing you can do to fight air pollution is to plant trees and gardens. Trees and other plants take in certain kinds of pollution—including exhaust from cars and trucks. The trees and plants put clean oxygen back into the air, which humans need to breathe. That means trees actually help clean

the air. Every single tree matters, so plant trees whenever you can.

And, of course, use less paper and recycle used paper whenever you can. Reduce the amount of paper you use, and you'll reduce the amount of trees that need to be cut down. That way, there will be more trees available to clean the air.



**Show image 10A-6: Light switch turned off**

One of the simplest things you can do is to try to use less electricity. Whenever you are watching television, working on a computer, or turning on a light, you are using electrical power. If people use less electrical power, then power plants won't need to burn quite as much coal, oil, or other natural resources, and

that will mean less air pollution. So, when you turn off a lamp or a television, you are actually helping to keep the air clean. Whenever you walk out of a

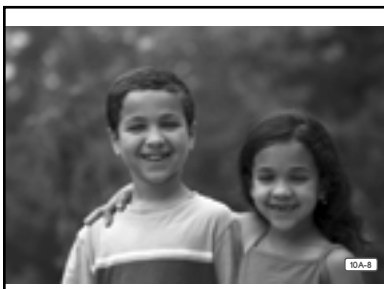
room for a while, remember to turn off the light. If it's daytime, try to open the blinds or curtains and let in some natural light so you don't have to use as much electricity.



**Show image 10A-7: Child washing hands**

Don't forget that living things, including humans, need freshwater to survive, and that there is a limited supply of freshwater on Earth. You can do your part in conserving water by not wasting it. We use water for baths, washing dishes, flushing the toilet, cooking, and watering our gardens and yards. The list

goes on and on. Remember to use only what you need. People can conserve water by turning off the faucet while brushing their teeth or by taking shorter showers. People can make sure that they turn off the sprinklers in the summer when the weather report calls for rain. Every water drop counts!



**Show image 10A-8: Happy children in nature**

Most important, I want to finish by reminding you that you are part of a truly beautiful and amazing world. Whether you live in the city or in the country, whether you live in a big apartment building, in a neighborhood, or on a farm, you are part of this world, and the things you do can affect the whole planet. People

sometimes pollute and create all sorts of problems for the environment. But people also have the power to find solutions and to take care of the environment. Make it a point to be part of the solution! If every person makes a small **effort** or a *try* to help reduce, reuse, and recycle, it adds up and makes a big difference in taking care of good old Earth. Thank you!



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**Check for Understanding**

**Recall:** Why is it important to help take care of the earth? *(It is important to help take care of the earth because it is where we all live. We want to keep it healthy and clean so that we can stay healthy and clean.)*

## Support

If students have difficulty responding to questions, reread pertinent lines of the read-aloud and/or refer to specific images.

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## Reading

### Offering Opinions

#### Entering/Emerging

Provide students sentence frames using a small set of learned phrases (e.g., “If we don’t take care of the earth . . .”).

#### Transitioning/Expanding

Provide students sentence frames using an expanded set of learned phrases (e.g., “If we do not take responsibility to take care of the earth, then might happen . . .”).

#### Bridging

Provide minimal support and guidance for open responses.

## COMPREHENSION QUESTIONS (10 MIN)

1. **Literal** Name some things you and your family can do to help solve the trash problem. (*Answers may vary, but may include that we can organize a litter pick-up; we can recycle; we can make a compost pile.*)
2. **Literal** Name some things you and your family can do to help solve the problem of air pollution. (*Answers may vary, but may include that we can plant trees or other plants that will clean the air; we can carpool, walk, or ride bikes instead of riding in the car; we can try to live closer to the places we go to often so we have to drive less; we can be sure to turn off things that use electricity, like lights or the television, when we are not using them.*)
3. **Literal** Name one way you can conserve freshwater. (*Answers may vary, but may include that we can only use the amount of freshwater we need; we can conserve water by turning off the water when brushing our teeth; take shorter showers.*)
4. **Evaluative** *Think Pair Share:* What do you think might happen to the land, water, and air on Earth if every person does not take responsibility to take care of the earth? (*Answers may vary, but should include support from the read-aloud.*)

## WORD WORK: EFFORT (5 MIN)

1. In the read-aloud you heard, “If every person makes a small effort to help reduce, reuse, and recycle, it adds up and makes a big difference in taking care of good old Earth.”
2. Say the word *effort* with me.
3. *Effort* means a try at something, especially when it is hard.
4. If people make an effort to reduce air pollution, we will conserve more of our natural resources.
5. Tell me about some ways that you would make an effort to help take care of the earth. Try to use the word *effort* when you tell about it. [Ask two or three students. If necessary, guide and/or rephrase students’ responses: “I will make an effort to take care of the earth by . . .”]
6. What’s the word we’ve been talking about?

**Use a Making Choices activity for follow-up.** If any of the sentences I read describe an effort to take care of the earth, say, “That is an effort to take care of the earth.” If anything I read does not describe an effort to take care of the earth, say, “That is not an effort to take care of the earth.”

- dropping my apple core on the playground after I eat it (*That is not an effort to take care of the earth.*)
- throwing my plastic water bottle into the correct recycling bin (*That is an effort to take care of the earth.*)
- composting my leftover food scraps in the compost bin (*That is an effort to take care of the earth.*)
- turning off the lights when I leave the room (*That is an effort to take care of the earth.*)
- letting the water faucet run while I brush my teeth (*That is not an effort to take care of the earth.*)

Lesson 10: Good-bye from Good Old Earth

# Application



**Writing:** Students will take part in the creation of a class book by contributing a drawing and piece of writing about taking care of the earth.

ELA.K.C.1.4; ELA.K.C.1.5; ELA.4.K.V.1.1

## BRAINSTORMING LINKS (5 MIN)

- Tell students that over the course of this domain they have heard about different problems that people create on Earth, such as landfills and pollution.
- Explain to students that, in this activity, they are going to brainstorm possible solutions to fix these problems.
- Refer to the Know-Wonder-Learn (KWL) Chart that you created to help answer questions.
- Say the word *landfill*. Ask students what problems come to mind when they think about landfills.
- Ask students to think about possible solutions that they might actually put into practice in the classroom and/or in the school that might help solve some problems related to landfills.
- As students share their ideas, record them on the board/chart paper.
- Next, say the word *pollution*. Ask students what problems come to mind when they think about land, water, and air pollution.
- Ask students to think about possible solutions that they might actually put into practice in the classroom and/or in the school that might help solve some problems related to pollution.
- As students share their ideas, record them on the board/chart paper.
- Discuss these possible solutions, and then choose one or more, if possible, to actually put into action.

### Support

If students cannot think of any solutions to the problem, give them hints, such as, “What about the three Rs? Can you think of ways we can reduce, reuse, or recycle?”

## CLASS BOOK: REDUCE, REUSE, RECYCLE (15 MIN)

- Tell the class that they are going to make a class book to help them remember what they have learned about taking care of the earth.
- Have each student choose one idea to draw a picture of. If possible, make sure students illustrate both the problem and the solution.
- As students complete their drawings, circulate around the room and ask them to discuss their drawings.
- Repeat and expand upon students' responses, using richer and more complex language, including, if possible, any read-aloud vocabulary.
- Have each student write at least one sentence about their drawing that explains what the drawing is about. The students will be using their knowledge of phonetic spelling to complete their writing.
- Before completing the book, work with students to create a cover and title page, listing themselves as authors and illustrators. Remind students the about the roles of authors and illustrators if needed.
- Publish the class book either by using an electronic publishing program, creating a slide presentation, or binding the pages to make a book to put in the class library for students to read again and again.

**Note:** If you cannot complete this activity, use time during the Culminating Activities days to complete it.

End of Lesson

### Support

Refer to the brainstorming activity you just completed to help students form ideas of problems and solutions.



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### Writing

#### Writing

#### Entering/Emerging

Have students use phrases and familiar vocabulary to describe their drawing.

#### Transitioning/Expanding

Have students describe their drawing using short sentence(s).

#### Bridging

Have students describe their drawing using longer, more detailed sentence(s).

### Support

Alternatively, have students dictate a caption for you to record.



# Domain Review

## NOTE TO TEACHER

You should spend one day reviewing and reinforcing the material in this domain. You may have students do any combination of the activities provided, in either whole-group or small-group settings.

## CORE CONTENT OBJECTIVES ADDRESSED IN THIS DOMAIN

Students will:

- Identify Earth and explain why people have a special responsibility to take care of the earth
- Explain what happens to garbage from its creation to being dumped in the landfill
- Identify Earth's natural resources (land, water, and air) and explain their importance
- Identify and describe the meaning of *reduce, reuse, recycle*
- Explain the process of recycling materials
- Identify common recyclable materials
- Identify and describe the process of composting
- Identify different types of pollution and their causes
- Describe air pollution and why it is harmful
- Identify basic types of water and describe the water cycle
- Identify possible solutions for the problems of garbage, litter, pollution, and conserving natural resources

## REVIEW ACTIVITIES

### Image Review

- Show the images from any read-aloud again, and have students retell the read-aloud using the images.

### Image Card Review

#### Materials: Image Cards 12–18

- Have students review Image Cards 12–18.
- Help students identify the image cards and brainstorm what has been learned about taking care of the earth.
- Then pass out Image Cards 12–18 to various students.
- Have students do a *Think Pair Share* for each image card.
  - For example, for the picture of a family riding bikes, a student might ask, “What other ways are there to reduce air pollution?” or “Why is riding a bike better than driving a car?”

### Key Vocabulary Brainstorming

#### Materials: Chart paper, chalkboard, or whiteboard

- Give the students a key domain concept or vocabulary word such as *pollution*.
- Have them brainstorm everything that comes to mind when they hear the word, such as *land, air, water*, etc.
- Record their responses on chart paper, a chalkboard, or a whiteboard for reference.

### Reducing Air Pollution

- Students have now learned about the harmful affects of air pollution to people, animals, and planet Earth.
- Discuss with students all the different ways they can help reduce air pollution, and make a list of their suggestions.
  - Suggestions may include turning off the lights when leaving a room; walking or riding a bike instead of using a car for short trips; planting trees; reusing and recycling goods; carpooling; etc.

### Riddles for Core Content

- Ask the students riddles such as the following to review core content:
  - We are three types of pollution that affect planet Earth. What are we? (*land pollution, water pollution, air pollution*)

## Image Cards 12–18



- We create most of the pollution on planet Earth. Who are we? (*people*)
- I am a form of pollution that is very harmful to people's lungs. What am I? (*air pollution; smog*)
- I create electricity using coal, but I am also a big source of air pollution. What am I? (*coal-fired power plant*)
- I am a natural resource that can be found in rivers, clouds, and oceans. What am I? (*water*)
- We are three types of water found on planet Earth. What are we? (*freshwater, salt water, and wastewater*)
- I turn wastewater into fresh, clean water that can be reused again. What am I? (*water treatment plant*)
- We are two sources of water pollution. What are we? (*factory waste and garbage*)

### **Domain-Related Trade Book or Teacher Choice**

#### **Materials: Trade book**

- Refer to the list of recommended trade books in the Digital Components for this domain, and choose a book to read aloud to the class.
- Explain to students that the person who wrote the book is called the author.
- Tell students the name of the author of the book.
- Explain to students that the person who makes the pictures for the book is called an illustrator.
- Tell students the name of the illustrator.
- Show students where you can find this information on the cover of the book or on the title page.
- As you read, use the same strategies that you have been using when reading the read-aloud selections in this Teacher Guide—pause and ask occasional questions; rapidly clarify critical vocabulary within the context of the read-aloud; etc.
- After you finish reading the trade book aloud, lead students in a discussion about the ways in which this book's information relates to what you have learned about taking care of the earth.

# Domain Assessment

This domain assessment evaluates each student's retention of domain and academic vocabulary words and the core content targeted in *Taking Care of the Earth*. The results should guide review and remediation the following day.

There are two parts to this assessment. You may choose to do the parts in more than one sitting if you feel this is more appropriate for students. Part I (vocabulary assessment) is divided into two sections: the first assesses domain-related vocabulary and the second assesses academic vocabulary. Part II of the assessment addresses the core content targeted in *Taking Care of the Earth*.

## PART I (ACTIVITY PAGE DA.1)

ELA.K.V.1.1

**Directions:** I am going to ask a question using a word you have heard in the read-alouds. If the answer to the question is yes, circle thumbs up. If the answer is no, circle thumbs down. I will ask each question two times. Let's do number one together.

1. **Earth:** Do we all live on the planet Earth? (*thumbs up*)
2. **Conserve:** Does using a lot of water help conserve our water supply? (*thumbs down*)
3. **Exhaust:** Does exhaust from cars make the air clean and smell good? (*thumbs down*)
4. **Landfill:** Is a landfill where garbage ends up after people throw it away? (*thumbs up*)
5. **Reservoirs:** Are reservoirs places where people store water? (*thumbs up*)
6. **Pollution:** Is pollution bad for the earth and for people? (*thumbs up*)
7. **Carpool:** If a person drives himself to work alone, is that a carpool? (*thumbs down*)
8. **Litter:** Is litter another word for trash that was not put in the right place? (*thumbs up*)
9. **Compost:** Does compost turn into freshwater after it sits awhile? (*thumbs down*)
10. **Recycle:** Are glass bottles and aluminum cans examples of items we can recycle to make new items? (*thumbs up*)

## Activity Page DA.1



**Directions:** I am going to ask more questions using other words you have heard in the read-alouds. If the answer is yes, circle thumbs up. If the answer is no, circle thumbs down. I will ask each question two times.

11. **Effort:** When people make an effort to do something, does that mean they try hard? (*thumbs up*)
12. **Reduce:** Is one way to help the planet to reduce pollution? (*thumbs up*)
13. **Global:** Is air pollution a global problem? (*thumbs up*)
14. **Supply:** If a classroom has a large supply of crayons, does that mean it has a lot of crayons? (*thumbs up*)
15. **Solution:** Is throwing trash out of the car window a solution to taking care of the earth? (*thumbs down*)

## PART II (ACTIVITY PAGE DA.2)

ELA.K.R.2.2

### Activity Page DA.2



**Directions:** I am going to read a sentence about an action someone does that affects the earth. First, you will listen to the sentence that I read. Next, you will decide if that action would help to take care of the earth or not. If the action is an example of taking care of the earth, circle thumbs up. If the action is not an example of taking care of the earth, circle thumbs down.

1. Nadia collects leftover vegetable scraps after dinner and puts them in the compost pile. Is she helping to take care of the earth? (*thumbs up*)
2. Rob turns off the bathroom light on his way out of the room. Is he helping to take care of the earth? (*thumbs up*)
3. Leila lets the water run for fifteen minutes while she washes her hands. Is she helping to take care of the earth? (*thumbs down*)
4. Jeannette throws her paper bag on the ground after she finishes her lunch. Is she helping to take care of the earth? (*thumbs down*)
5. Cate draws on both sides of a clean piece of paper before recycling it. Is she helping to take care of the earth? (*thumbs up*)
6. Sam's dad rides his bike to work every day instead of driving his car. Is he helping to take care of the earth? (*thumbs up*)
7. The Washington family lives close to their workplace and their kids' school so they drive their car less. Are they helping to take care of the earth? (*thumbs up*)
8. James uses six paper towels to dry off his hands. Is he helping to take care of the earth? (*thumbs down*)

# Culminating Activities

## NOTE TO TEACHER

Please use these final two days to address class results of the Domain Assessment. Based on the results of the Domain Assessment, you may wish to use this class time to provide remediation opportunities that target specific areas of weakness for individual students, small groups, or the whole class.

Alternatively, you may also choose to use this class time to extend or enrich students' experience with domain knowledge. A number of enrichment activities are provided below in order to provide students with opportunities to enliven their experiences with domain concepts.

## REMEDIATION

You may choose to regroup students according to particular areas of weakness, as indicated by Formative and Domain Assessment results.

Remediation opportunities include:

- targeting Review Activities
- revisiting lesson Applications
- rereading and discussing select read-alouds
- using the corresponding activities in the Language Studio

### Informational Text

**Materials: domain-related informational trade book (should have an author, illustrator, and title page)**

- Show students the domain-related informational book you selected to read.
- Ask students to identify the front cover of the book. Ask students what kinds of things are on the front cover of a book. (*Answers vary, including title, author, illustrator, pictures, etc.*)
- Have students turn and talk about what an author does. Then have a few pairs share their answers.

- Have students turn and talk about what an illustrator does. Have a few pairs share their answers.
- Ask students to identify the back cover of the book. Ask students what kinds of things are on the back cover of the book. (*Answers may vary, depending on book.*)
- Ask students where the title page is usually found in a book. Then, show students the title page and discuss what can be found on the page. Be sure to point out that the author and illustrator are also listed on this page.
- Read the book aloud to students. Stop from time to time to point out what the author is saying or what the illustrator has presented, making sure to use the terms *author* and *illustrator*.

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## ENRICHMENT

### Student Choice

- Have students select a read-aloud to be heard again.

### Domain-Related Trade Book

#### Materials: Trade book

- Refer to the list of recommended trade books in the Digital Components for this domain, and choose a book to read aloud to the class.
- As you read, use the same strategies that you have been using when reading the read-aloud selections in this Teacher Guide—pause and ask occasional questions; rapidly clarify critical vocabulary within the context of the read-aloud; etc.
- After you finish reading the trade book aloud, lead students in a discussion about the ways in which this book’s information relates to what you have learned about taking care of the earth.

### Guest Speakers

- Invite parents or trusted community members whose careers or volunteer work help to take care of the earth.
  - For example, you may invite someone who works at a water treatment plant or reservoir, or someone who maintains your local parks.
- Ask your guests to bring in any photographs or other objects that will help show students what they do to help take care of the earth.
- You will want to share with your guest speakers, ahead of time, what you have already discussed in class so that they are better able to address students.

## Take Action

### Materials: Drawing paper, drawing tools

**Note:** You may want to tie this to an event, such as Earth Day, National Walk to School Day, Arbor Day, etc.

- Students have now learned about many different ways to take care of the earth: recycling, composting, reducing air pollution, etc.
- Tell the class or a small group that they are going to make a poster to encourage others in the school to pitch in.
  - Suggestions may include reminders to turn off the lights when leaving a room; walk or ride a bike instead of riding in a car for short trips; plant trees; reuse and recycle things; carpool; etc.
- If possible, hang the posters around the school to teach students to promote awareness.

## Reuse Art Fair

**Note:** This can be done in coordination with the art teacher or can be made into a home-school connection activity.

- Have a few reuse art project options ready for students to choose to do.
  - Some suggestions include: coffee can planters, egg carton organizers, yogurt cup or plastic bottle shakers, milk carton bird houses, cereal box place mats, glass bottle picture frames, and shoebox treasure chests.
- You may wish to ask students for their suggestions as well and add those to the options.
- Once your class is finished with their reuse art projects, set up a Reuse Art Fair in your room (or another open space area in the school).

## Air Quality Color Check

- Tell the class or small group that since they have learned about how to reduce air pollution, they can now also check to see how much pollution is in the air.
- Explain to students that local weather or news stations provide a daily air quality color check to let people know how good or bad the air is for that day.
- Visit <http://www.weather.com/activities/health/airquality/> or your local news weather website to find out what the air quality is in your region.





# Teacher Resources

Kindergarten	Knowledge 11
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## Teacher Guide

Kindergarten | Knowledge 11

# Teacher Resources

In this section you will find:

- Activity Book Answer Key

# ACTIVITY BOOK ANSWER KEY

NAME: \_\_\_\_\_ 3.1 Activity Page  
DATE: \_\_\_\_\_

Directions: There are three pictures of natural resources next to each item. Your teacher will read the names of the natural resources to you. Circle the natural resource that is being used for each item.

1.				
2.				
3.				
4.				
5.				
6.				

Knowledge 1.1

99

NAME: \_\_\_\_\_ 6.1 Activity Page  
DATE: \_\_\_\_\_

Directions: These pictures show the steps in the process of composting. Look at each picture and think about what is happening. Cut out the pictures and put them in the correct order to show the steps in the process. Recount the process using the pictures. When you are sure that you have them in the correct order, glue or tape them on a separate sheet of paper in the correct order.

1.	
2.	
3.	
4.	

Knowledge 1.1

101

NAME: \_\_\_\_\_ PP.1 Assessment  
DATE: \_\_\_\_\_

Directions: Your teacher will read the label for each of the recycling bins on the right-hand side of the page. Draw a line from each recyclable item to the bin in which it belongs.


Knowledge 1.1

105



NAME: \_\_\_\_\_ DA.1 Assessment  
DATE: \_\_\_\_\_



Directions: Listen to your teacher's instructions.



1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		



Knowledge 1.1



107

11.  

12.  

13.  



14.  



15.  



108 Knowledge 11 Taking Care of the Earth



NAME: \_\_\_\_\_ DA.2 Assessment



DATE: \_\_\_\_\_



1.  



2.  



3.  

4.  

5.  

6.  

7.  

8.  

Directions: Listen to your teacher's instructions.

109 Knowledge 11

# Core Knowledge Language Arts

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