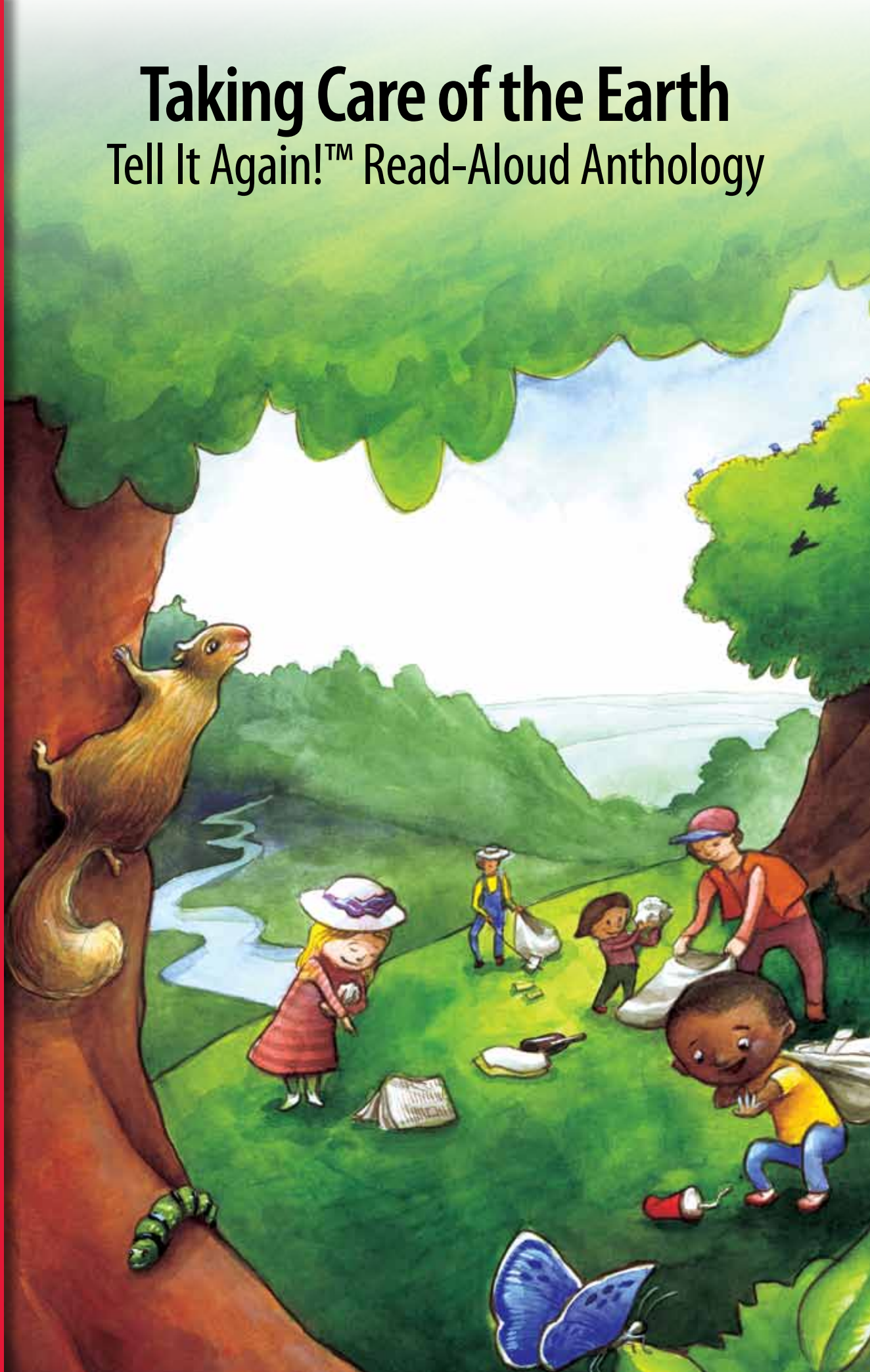
Taking Care of the Earth

Tell It Again!™ Read-Aloud Anthology



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Taking Care of the Earth

Tell It Again!™ Read-Aloud Anthology

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Tell It Again!™ Read-Aloud Anthology

Alignment Chart for Taking Care of the Earth

The following chart contains core content objectives addressed in this domain. It also demonstrates alignment between the Common Core State Standards and corresponding Core Knowledge Language Arts (CKLA) goals.

Alignment Chart for Taking Care of the Earth	**Lesson**									
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Core Content Objectives										
Explain why people have a special responsibility to take care of the earth	✓							✓		✓
Explain that Earth is composed of natural resources (land, water, and air) and that humans, plants, and animals depend on Earth's natural resources to live	✓		✓						✓	
Explain different types of pollution, including litter, air pollution, and water pollution, and how most types of pollution are caused by people		✓					✓	✓	✓	
Explain what happens to garbage from its creation to being dumped in the landfill; to recyclable materials from home to a recycling factory; to discarded food from the table to the compost pile to the garden; and the water cycle		✓			✓	✓			✓	
Identify the recycling symbol and the phrase "reduce, reuse, and recycle," and understand that recycled materials are made from items that have already been used and otherwise would be garbage				✓						
Identify common recyclable materials, including glass, plastic, aluminum, cardboard, and paper; and that composting is a type of recycling					✓	✓				
Identify possible solutions for the problems of garbage, litter, pollution, and conserving natural resources					✓	✓	✓	✓	✓	✓

Alignment Chart for Taking Care of the Earth		Lesson									
		1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Reading Standards for Informational Text: Kindergarten											
Key Ideas and Details											
STD RI.K.1	With prompting and support, ask and answer questions about key details in a text.										
CKLA Goal(s)	With prompting and support, ask and answer questions (e.g., *who, what, where, when*) requiring literal recall and understanding of the details and/or facts of a nonfiction/ informational read-aloud					✓					
	Answer questions that require making interpretations, judgments, or giving opinions about what is heard in a nonfiction/informational read-aloud, including answering *why* questions that require recognizing cause/effect relationships					✓					
STD RI.K.2	With prompting and support, identify the main topic and retell key details of a text.										
CKLA Goal(s)	With prompting and support, identify the main topic and retell key details of a nonfiction/ informational read-aloud		✓	✓		✓	✓	✓	✓		
STD RI.K.3	With prompting and support, describe the connection between two individuals, events, ideas, or pieces of information in a text.										
CKLA Goal(s)	With prompting and support, describe the connection between two individuals, events, ideas, or pieces of information in a nonfiction/ informational read-aloud	✓	✓			✓	✓	✓			
Craft and Structure											
STD RI.K.4	With prompting and support, ask and answer questions about unknown words in a text.										
CKLA Goal(s)	With prompting and support, ask and answer questions about unknown words in nonfiction/informational read-alouds and discussions					✓					

Alignment Chart for Taking Care of the Earth		Lesson									
		1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
STD RI.K.6	Name the author and illustrator of a text and define the role of each in presenting the ideas or information in a text.										
CKLA Goal(s)	With prompting and support, describe the role of an author and illustrator in a nonfiction/ informational text					✓			✓	✓	
Integration of Knowledge and Ideas											
STD RI.K.7	With prompting and support, describe the relationship between illustrations and the text in which they appear (e.g., what person, place, thing, or idea in the text an illustration depicts).										
CKLA Goal(s)	With prompting and support, describe illustrations from a nonfiction/informational read-aloud, using the illustrations to check and support comprehension of the read-aloud					✓					
STD RI.K.9	With prompting and support, identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures).										
CKLA Goal(s)	With prompting and support, compare and contrast similarities and differences within a single nonfiction/ informational read-aloud or between two or more nonfiction/informational read-alouds				✓			✓		✓	
Range of Reading and Level of Text Complexity											
STD RI.K.10	Actively engage in group reading activities with purpose and understanding.										
CKLA Goal(s)	Actively engage in nonfiction/ informational read-alouds					✓					
Writing Standards: Kindergarten											
Text Types and Purposes											
STD W.K.2	Use a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic.										
CKLA Goal(s)	Use a combination of drawing, dictating, and writing to present information from a nonfiction/ informational read-aloud, naming the topic and supplying some details				✓						✓

Alignment Chart for Taking Care of the Earth		Lesson									
		1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
STD W.K.3	Use a combination of drawing, dictating, and writing to narrate a single event or several loosely linked events, tell about the events in the order in which they occurred, and provide a reaction to what happened.										
CKLA Goal(s)	Use a combination of drawing, dictating, and writing to narrate a single event or several loosely linked events, tell about the events in the order in which they occurred, and provide a reaction to what happened		✓				✓				
Production and Distribution of Writing											
STD W.K.5	With guidance and support from adults, respond to questions and suggestions from peers and add details to strengthen writing as needed.										
CKLA Goal(s)	With guidance and support from adults, respond to questions and suggestions from peers and add details to strengthen writing as needed				✓						
STD W.K.6	With guidance and support from adults, explore a variety of digital tools to produce and publish writing, including in collaboration with peers.										
CKLA Goal(s)	With guidance and support from adults, explore a variety of digital tools to produce and publish writing, including in collaboration with peers										✓
STD W.K.7	Participate in shared research and writing projects (e.g., explore a number of books by a favorite author and express opinions about them).										
CKLA Goal(s)	Participate in shared research and writing projects (e.g., group scientific research and writing)										✓
STD W.K.8	With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.										
CKLA Goal(s)	With assistance, categorize and organize facts and information within a given domain to answer questions	✓	✓				✓	✓			✓

Alignment Chart for Taking Care of the Earth		Lesson									
		1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Speaking and Listening Standards: Kindergarten											
Comprehension and Collaboration											
STD SL.K.1	Participate in collaborative conversations with diverse partners about Kindergarten topics and texts with peers and adults in small and large groups										
STD SL.K.1a	Follow agreed-upon rules for discussions (e.g., listening to others and taking turns speaking about the topics and texts under discussion).										
CKLA Goal(s)	Use agreed-upon rules for group discussions, e.g., look at and listen to the speaker, raise hand to speak, take turns, say "excuse me" or "please," etc.	✓									
STD SL.K.1b	Continue a conversation through multiple exchanges.										
CKLA Goal(s)	Carry on and participate in a conversation over four to five turns, staying on topic, initiating comments or responding to a partner's comments, with either an adult or another child of the same age	✓									
STD SL.K.2	Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.										
CKLA Goal(s)	Ask and answer questions to clarify information in a fiction or nonfiction/informational read-aloud	✓									
STD SL.K.3	Ask and answer questions in order to seek help, get information, or clarify something that is not understood.										
CKLA Goal(s)	Ask questions to clarify directions, exercises, and/or classroom routines				✓						
Presentation of Knowledge and Ideas											
STD SL.K.4	Describe familiar people, places, things, and events and, with prompting and support, provide additional detail.										
CKLA Goal(s)	Describe familiar people, places, things, and events and, with prompting and support, provide additional detail		✓								
STD SL.K.5	Add drawings or other visual displays to descriptions as desired to provide additional detail.										
CKLA Goal(s)	Add drawings or other visual displays to descriptions as desired to provide additional detail				✓						

Alignment Chart for Taking Care of the Earth		Lesson									
		1	2	3	4	5	6	7	8	9	10
STD SL.K.6	Speak audibly and express thoughts, feelings, and ideas clearly.										
CKLA Goal(s)	Speak audibly and express thoughts, feelings, and ideas clearly					✓					
Language Standards: Kindergarten											
Conventions of Standard English											
STD L.K.1	Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.										
STD L.K.1b	Use frequently occurring nouns and verbs.										
CKLA Goal(s)	Use frequently occurring nouns and verbs in oral language					✓					
STD L.K.1f	Produce and expand complete sentences in shared language.										
CKLA Goal(s)	Answer questions orally in complete sentences					✓					
	Produce and expand complete sentences in shared language					✓					
Vocabulary Acquisition and Use											
STD L.K.4	Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on Kindergarten reading and content.										
STD L.K.4a	Identify new meanings for familiar words and apply them accurately (e.g., knowing *duck* is a bird and learning the verb *to duck*).										
CKLA Goal(s)	Identify new meanings for familiar words and apply them accurately (e.g., knowing *duck* is a bird and learning the verb *to duck*)	✓						✓			
STD L.K.5	With guidance and support from adults, explore word relationships and nuances in word meanings.										
STD L.K.5b	Demonstrate understanding of frequently occurring verbs and adjectives by relating them to their opposites (antonyms).										
CKLA Goal(s)	Demonstrate understanding of frequently occurring verbs and adjectives by relating them to their opposites (antonyms)		✓	✓	✓						
STD L.K.5c	Identify real-life connections between words and their use (e.g., note places at school that are *colorful*).										
CKLA Goal(s)	Identify real-life connections between words and their use (e.g., note places at school that are *colorful*)					✓					

Alignment Chart for Taking Care of the Earth		Lesson									
		1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
STD L.K.6	Use words and phrases acquired through conversations, reading and being read to, and responding to texts.										
CKLA Goal(s)	Use words and phrases acquired through conversations, being read to, and responding to texts					✓					
	Learn the meaning of common sayings and phrases					✓					
Additional CKLA Goals											
Listen to a variety of texts, including informational text						✓					
Prior to listening to a read-aloud, identify orally what they know and have learned that may be related to the specific story or topic to be read aloud		✓		✓	✓	✓		✓			
Discuss personal responses to a given topic and connect those to the read-aloud							✓				
Prior to or while listening to a read-aloud, orally predict what will happen in the story based on text heard thus far, and then compare the actual outcome to the prediction			✓				✓			✓	
Distinguish fantasy from realistic text		✓								✓	
Evaluate and select read-alouds, books, or poems on the basis of personal choice for rereading										✓	
Use frequently occurring prepositions (e.g., to, from, in, out, on, off, for, of, by, with)									✓		

✓ These goals are addressed in all lessons in this domain. Rather than repeat these goals as lesson objectives throughout the domain, they are designated here as frequently occurring goals.

Introduction to Taking Care of the Earth

This introduction includes the necessary background information to be used in teaching the *Taking Care of the Earth* domain. The *Tell It Again! Read-Aloud Anthology* 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 fifty 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 fourteen days total on this domain.**

Week One				
Day 1	**Day 2** #	**Day 3** ⑩	**Day 4**	**Day 5** #
Lesson 1A: "Introducing the Earth" (35 min.)	Lesson 2A: "Garbage" (35 min.)	Lesson 3A: "Natural Resources" (35 min.)	Lesson 4A: "Reduce, Reuse, Recycle" (35 min.)	Lesson 5A: "Recycle! Recycle! Recycle!" (35 min.)
Lesson 1B: Extensions (15 min.)	Lesson 2B: Extensions (15 min.)	Lesson 3B: Extensions (15 min.)	Lesson 4B: Extensions (15 min.)	Lesson 5B: Extensions (15 min.)
50 min.	50 min.	50 min.	50 min.	50 min.

Week Two				
Day 6 ⑩	**Day 7** ⑩	**Day 8**	**Day 9**	**Day 10**
Lesson 6A: "Composting" (35 min.)	Pausing Point (35 min.)	Lesson 7A: "Pollution" (35 min.)	Lesson 8A: "Air Pollution" (35 min.)	Lesson 9A: "Willy the Water Drop" (35 min.)
Lesson 6B: Extensions (15 min.)	Pausing Point (15 min.)	Lesson 7B: Extensions (15 min.)	Lesson 8B: Extensions (15 min.)	Lesson 9B: Extensions (15 min.)
50 min.	50 min.	50 min.	50 min.	50 min.

Week Three			
Day 11	**Day 12**	**Day 13**	**Day 14**
Lesson 10A: "Goodbye from Good Old Earth" (35 min.)	Domain Review (35 min.)	Domain Assessment (35 min.)	Culminating Activities (35 min.)
Lesson 10B: Extensions (15 min.)	Domain Review (15 min.)	Domain Assessment (15 min.)	Culminating Activities (15 min.)
50 min.	50 min.	50 min.	50 min.

⑩ Lessons include Student Performance Task Assessments

\# Lessons require advance preparation and/or additional materials; please plan ahead

Domain Components

Along with this anthology, you will need:

- *Tell It Again! Media Disk* or the *Tell It Again! Flip Book* for *Taking Care of the Earth*
- *Tell It Again! Image Cards* for *Taking Care of the Earth*
- *Tell It Again! Supplemental Guide* for *Taking Care of the Earth*
- *Tell It Again! Multiple Meaning Word Posters* for *Taking Care of the Earth*
- *Tell It Again! Earth Hat* for *Taking Care of the Earth*

Recommended Resource:

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

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.

All the read-alouds are narrated from the first-person perspective of Earth itself. Teachers are encouraged to wear the Earth Hat that is included with the materials for this domain. Use of the hat will help with the transition each day to the reading of the read-alouds, and it will help students understand the purpose of the read-alouds. This is not simply a novelty. It will get students' attention.

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.

Lesson 1

creatures
Earth
outer space
responsibility
surface

Lesson 2

decompose
dumpster
hazardous
landfill

Lesson 3

conserve
decayed
natural resources
oxygen

Lesson 4

action
generate
products
recycle
reduce

Lesson 5

aluminum
furnace
solution
sorted

Lesson 6

compost
leftovers
nutrients
process

Lesson 7

litter
pollution
smog
toxic

Lesson 8

appliance
exhaust
global
harmed

Lesson 9

evaporate
pollutants
reservoirs
supply

Lesson 10

carpool
effort
organize

Student Performance Task Assessments

In the *Tell It Again! Read-Aloud Anthology* for *Taking Care of the Earth,* there are numerous opportunities to assess students' learning. These assessment opportunities range from informal observations, such as *Think Pair Share* and some Extension activities, to more formal written assessments. These Student Performance Task Assessments (SPTA) are identified in the *Tell It Again! Read-Aloud Anthology* with this icon: ⑩. There is also an end-of-domain summative assessment. Use the Tens Conversion Chart located in the Appendix to convert a raw score on each SPTA into a Tens score. On the same page, you will also find the rubric for recording observational Tens Scores.

Above and Beyond

In the *Tell It Again! Read-Aloud Anthology* for *Taking Care of the Earth,* there are numerous opportunities in the lessons and the Pausing Point to challenge students who are ready to attempt activities that are above grade-level. These activities are labeled "Above and Beyond" and are identified with this icon: .

Supplemental Guide

Accompanying the *Tell It Again! Read-Aloud Anthology* is a *Supplemental Guide* designed to assist education professionals who serve students with limited English language skills or students with limited home literacy experience, which may include English Language Learners (ELLs) and children with special needs. Teachers whose students would benefit from enhanced oral language practice may opt to use the *Supplemental Guide* as their primary guide in the Listening & Learning strand. Teachers may also choose to begin a domain by using the *Supplemental Guide* as their primary guide before transitioning to the *Tell It Again! Read-Aloud Anthology,* or may choose individual activities from the Supplemental Guide to augment the content covered in the *Tell It Again! Read-Aloud Anthology.*

The *Supplemental Guide* activities that may be particularly relevant to any classroom are the Multiple Meaning Word Activities and

accompanying Multiple Meaning Word Posters, which help students determine and clarify different meanings of words; Syntactic Awareness Activities, which call students' attention to sentence structure, word order, and grammar; and Vocabulary Instructional Activities, which place importance on building students' general academic, or Tier 2, vocabulary. These activities afford all students additional opportunities to acquire a richer understanding of the English language. Several of these activities have been included as Extensions in the *Tell It Again! Read-Aloud Anthology*. In addition, several words in the *Tell It Again! Read-Aloud Anthology* are underlined, indicating that they are multiple-meaning words. The accompanying sidebars explain some of the more common alternate meanings of these words. *Supplemental Guide* activities included in the *Tell It Again! Read-Aloud Anthology* are identified with this icon ⇆.

Recommended Resources for Taking Care of the Earth

Trade Book List

The *Tell It Again! Read-Aloud Anthology* includes a number of opportunities in Extensions, the Pausing Point, and the and Culminating Activities for teachers to select trade books from this list to reinforce domain concepts through the use of authentic literature. In addition, teachers should consider other times throughout the day when they might infuse authentic domain-related literature. If you recommend that families read aloud with their child each night, you may wish to suggest that they choose titles from this trade book list to reinforce the domain concepts. You might also consider creating a classroom lending library, allowing students to borrow domain-related books to read at home with their families.

1. *And Still the Turtle Watched,* by Sheila MacGill-Callahan and illustrated by Barry Moser (Puffin, 1996) ISBN 978-0140558364
2. *Arthur Turns Green,* by Marc Brown (Little, Brown Books for Young Readers, 2011) ISBN 978-0316129244

3. *Blow! Air,* by Núria Jiménez and Empar Jiménez and illustrated by Rosa M. Curto (Barron's Educational Series, 2010) ISBN 978-0764145452
4. *Click! Energy,* by Núria Jiménez and Empar Jiménez and illustrated by Rosa M. Curto (Barron's Educational Series, 2010) ISBN 978-0764145476
5. *Compost Stew: An A to Z Recipe for the Earth,* by Mary McKenna Siddals and illustrated by Ashley Wolff (Tricycle Press, 2010) ISBN 978-1582463162
6. *EcoArt! Earth-Friendly Art & Craft Experiences for 3– to 9–Year Olds,* by Laurie Carlson (Williamson Pub, 1992) ISBN 978-0913589687
7. *Garbage and Recycling (Young Discoverers: Environmental Facts and Experiments),* by Rosie Harlow and Sally Morgan (Kingfisher, 2002) ISBN 978-0753455036
8. *The Green Mother Goose: Saving the World One Rhyme at a Time,* by Jan Peck and David Davis and illustrated by Carin Berger (Sterling, 2011) ISBN 978-1402765254
9. *I Am Water (Hello Reader! Level 1 Science),* by Jean Marzollo and illustrated by Judith Moffatt (Cartwheel, 1996) ISBN 978-0590265874
10. *It's Earth Day! (Little Critter),* by Mercer Mayer (HarperFestival, 2008) ISBN 978-0060539597
11. *Just a Dream,* by Chris Van Allsburg (Houghton Mifflin, 1990) ISBN 978-0395533086
12. *The Lorax,* by Dr. Seuss (Random House Books for Young Readers, 1971) ISBN 978-0394823379
13. *Michael Recycle,* by Ellie Bethel and illustrated by Alexandra Colombo (Idea & Design Works, 2008) ISBN 978-1600102240
14. *Rachel: The Story of Rachel Carson,* by Amy Ehrlich and illustrated by Wendell Minor (Voyager Books, 2008) ISBN 978-0152063245
15. *Recycle!: A Handbook for Kids,* by Gail Gibbons (Little, Brown Young Readers, 1996) ISBN 978-0316309431

16. *A River Ran Wild,* by Lynne Cherry (Voyager Books, 2002) ISBN 978-0152163723
17. *The Three Rs: Reduce, Reuse, Recycle (What Do You Know About?),* by Núria Roca and illustrated by Rosa M. Curto (Barron's Educational Series, 2007) ISBN 978-0764135811
18. "Sarah Sylvia Cynthia Stout Would Not Take the Garbage Out," from *Where the Sidewalk Ends,* by Shel Silverstein (HarperCollins Children's Books, 2004) ISBN 978-0060572341
19. *Splash! Water, by* Núria Jiménez and Empar Jiménez and illustrated by Rosa M. Curto (Barron's Educational Series, 2010) ISBN 978-0764145445
20. *Stories for a Fragile Planet: Traditional Tales About Caring for the Earth,* by Kenneth Steven and Jane Ray (Lion UK, 2013) ISBN 978-0745963860
21. *The Wartville Wizard,* by Don Madden (Aladdin, 1993) ISBN 978-0689716676
22. *Where Do Recyclable Materials Go? Read, Think, Recycle,* by Sabbithry Persad (Firewater Media Group, 2011) ISBN 978-0981243900
23. *Where Does the Garbage Go?,* by Paul Showers and illustrated by Randy Chewning (Harper Trophy, 1994) ISBN 978-0064451147
24. *Why Should I Save Water? (Why Should I?),* by Jen Green and illustrated by Mike Gordon (Barron's Educational Series, 2005) ISBN 978-0764131578
25. *The Wump World,* by Bill Peet (Sandpiper, 1981) ISBN 978-0395311295
26. *Yuck! Waste,* by Núria Jiménez and Empar Jiménez and illustrated by Rosa M. Curto (Barron's Educational Series, 2010) ISBN 978-0764145469

Websites and Other Resources

Student Resources

1. Groovy Garden Game
   http://to.pbs.org/VyADoG
2. U.S. National Park Pictures
   http://bit.ly/Ugne4D
3. Connect the Dots
   http://bit.ly/SVjwJ8
4. Ocean Pictures
   http://bit.ly/U6J4kR
5. Children of the Earth United
   http://childrenoftheearth.org

Teacher Resources

6. The Green Guide for Kids: Reduce, Reuse, Recycle
   http://bit.ly/TuEpuB
7. Landfills
   http://bit.ly/TuExdO
8. Walk to School
   walktoschool.org
9. School Recycling Program
   http://dsorg.us/ViqlDO

Introducing the Earth

1

☑ *Lesson Objectives*

Core Content Objectives

Students will:

- ✓ Explain why people have a special responsibility to take care of the earth
- ✓ Explain that Earth is composed of land, water, and air
- ✓ Explain that humans, plants, and animals depend on Earth's land, water, and air to live

Language Arts Objectives

The following language arts objectives are addressed in this lesson. Objectives aligning with the Common Core State Standards are noted with the corresponding standard in parentheses. Refer to the Alignment Chart for additional standards addressed in all lessons in this domain.

Students will:

- ✓ With prompting and support, describe the three things that make up the earth (RI.K.3)
- ✓ With assistance, categorize and organize facts and information about what they know, wonder, and would like to learn about taking care of the earth (W.K.8)
- ✓ Identify new meanings for familiar words, such as *earth,* and apply them accurately (L.K.4a)
- ✓ Prior to listening to "Introducing the Earth," identify orally what they know about Earth and how to take care of the planet
- ✓ Explain that "Introducing the Earth" is realistic text because we really do depend on Earth's land, water, and air to survive, but it is fantasy because the earth doesn't have feelings or talk

Core Vocabulary

creatures, *n.* Living beings, such as animals and/or people
Example: Deer, raccoons, and squirrels are just a few of the many different kinds of creatures who live in the forest.
Variation(s): creature

Earth, *n.* The planet that we live on; the world
Example: The planet Earth is made up of land, water, and air.
Variation(s): the earth

outer space, *n.* The area beyond Earth
Example: The moon and the stars are in outer space.
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 outside layer of something
Example: The surface of a marble is smooth.
Variation(s): surfaces

At a Glance	Exercise	Materials	Minutes
Introducing the Read-Aloud	Domain Introduction	globe	10
	Know-Wonder-Learn Chart	chart paper	
	Introduce the Narrator	Earth Hat	
	Purpose for Listening		
Presenting the Read-Aloud	Introducing the Earth	Earth Hat	10
Discussing the Read-Aloud	Comprehension Questions		10
	Word Work: Responsibility		5
	Complete Remainder of the Lesson Later in the Day		
Extensions	Know-Wonder-Learn Chart	KWL chart	15
	Multiple Meaning Word Activity: Earth	Poster 1M: Earth	
Take-Home Material	Family Letter	Instructional Masters 1B-1 and IB-2	*

Introducing the Earth

1A

Introducing the Read-Aloud *10 minutes*

Domain Introduction

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. Then show students a globe. 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 you 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.

Know-Wonder-Learn Chart

Make a KWL (**K**now-**W**onder-**L**earn) chart to introduce the new domain, *Taking Care of the Earth.* Remember to complete the chart on large chart paper, so that you can add to the chart as students listen to multiple read-alouds.

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!"

Then ask, "What do you wonder about or want to know about planet Earth and how to take care of it?" You might need to prompt them 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 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. Remember to save the chart paper, which will be used throughout this domain.

Introduce the Narrator

Teachers are encouraged to wear the Earth Hat. (See Introduction, page 2.) This is not simply a novelty. It will get students' attention.

Ask students if they think planet Earth can talk. Tell them 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.

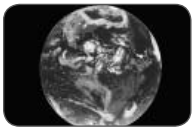
Note: Wearing the Earth Hat only during read-alouds will signal to students that "Good Old Earth" (the first-person narrator of this domain) is speaking to them.

Purpose for Listening

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

Presenting the Read-Aloud — **10** *minutes*

Introducing the Earth



1 Describe what you see in the picture.

2 Earth is the planet on which we live. *Earth* also means the ground.

3 The moon, stars, and sun are all objects in outer space.

Show image 1A-1: Earth from outer space [1]

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.* [2]

This is what I look like from **outer space,** from somewhere beyond our friend the moon. [3] 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.** [4] Let's take a look at some of these places together.

4 The surface of the earth is its outer layer of land, or the ground.

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.[5]

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

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.[6]

6 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.[7] You have to share the earth; you're in it together.

7 So it's your job; you're expected to take care of the earth.

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.

Discussing the Read-Aloud — *15 minutes*

Comprehension Questions — 10 *minutes*

If students have difficulty responding to questions, reread pertinent passages of the read-aloud and/or refer to specific images. If students give one-word answers and/or fail to use read-aloud or domain vocabulary in their responses, acknowledge correct responses by expanding students' responses, using richer and more complex language. Ask students to answer in complete sentences by having them restate the question in their responses.

1. *Literal* What are some other names for Earth? (the world, the planet, Mother Earth)
2. *Inferential* What three things make up the earth? (land, water, air)
3. *Inferential* Give examples of where you find water on the earth. (oceans, lakes, ponds, rivers, streams)
4. *Inferential* Why are land, water, and air important to people? (People need land to live on, water to drink, and air to breathe.)
5. *Literal* Why do people have special responsibilities to take care of Earth? (We are the smartest creatures on Earth, and other living things depend on us.)

[Please continue to model the *Think Pair Share* process for students, as necessary, and scaffold students in their use of the process.]

I am going to ask a question. I will give you a minute to think about the question. Then I will ask you to turn to your neighbor and discuss the question. Finally, I will call on several of you to share what you discussed with your partner.

6. *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.)
7. After hearing today's read-aloud and questions and answers, do you have any remaining questions? [If time permits, you may wish to allow for individual, group, or class research of the text and/or other resources to answer these questions.]

Word Work: Responsibility

5 *minutes*

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. Directions: 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.)

1. setting the table
2. picking up your toys
3. driving yourself to school
4. making your dinner
5. washing your laundry, or dirty clothes
6. taking care of a pet
7. brushing your teeth
8. making your bed

Complete Remainder of the Lesson Later in the Day

Introducing the Earth

1B

Extensions — *15 minutes*

Know-Wonder-Learn Chart

Review the 'K' and 'W' columns of the KWL Chart created earlier. 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. Reread small sections of the text aloud, as necessary, to help students check the accuracy of their responses. 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. Remember to save the chart paper, which will be used throughout this domain.

⇆ Multiple Meaning Word Activity

Associated Phrase: Earth

1. [Show Poster 1M: Earth.] In the read-aloud you heard, "People are the most intelligent creatures here on Earth." 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.]

2. With your neighbor, talk about what you think of when you see this picture of Earth. I will call on a few of you to share your responses. Try to answer in complete sentences. (When I see Earth, I think of the world, the planet, Mother Earth, etc.) [Call on three or four students to share their answers.]
3. *Earth* also means something else. *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.]
4. Now with your neighbor, talk about what you think of when you see this kind of earth. I will call on a few of you to share your responses. Try to answer in complete sentences. (This picture of earth makes me think of the ground, digging in the dirt, planting seeds or growing plants in the soil, etc.) [Call on three or four students to share their answers.]

Take-Home Material

Family Letter

Send home Instructional Masters 1B-1 and 1B-2.

Garbage

2

☑ *Lesson Objectives*

Core Content Objectives

Students will:

- ✓ Explain that humans generate large amounts of garbage, which must be disposed of
- ✓ Sequence what happens to garbage from its creation to being dumped in the landfill

Language Arts Objectives

The following language arts objectives are addressed in this lesson. Objectives aligning with the Common Core State Standards are noted with the corresponding standard in parentheses. Refer to the Alignment Chart for additional standards addressed in all lessons in this domain.

Students will:

- ✓ With prompting and support, identify the main topic and retell key details from "Garbage" (RI.K.2)
- ✓ With prompting and support, put image cards of what happens to garbage in the proper sequence (RI.K.3)
- ✓ Dictate what happens to garbage in the proper sequence, using the temporal words "first," "then," "next," "later," and "finally" (W.K.3)
- ✓ With assistance, create a KWL chart and use it to answer questions (W.K.8)
- ✓ Describe familiar things, such as garbage and, with prompting and support, provide additional detail (SL.K.4)
- ✓ Demonstrate understanding of frequently occurring adjectives, such as *hazardous,* by relating them to their opposites (antonyms) (L.K.5b)

✓ Prior to listening to "Garbage," orally predict where garbage goes after it is thrown out, based on text heard thus far, and then compare the actual outcome to the prediction

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

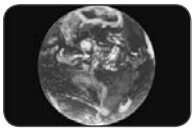
landfill, *n.* A place where large amounts of garbage are dumped and/or buried
Example: The workers used a bulldozer to dump all of the town's trash into the landfill.
Variation(s): landfills

At a Glance	Exercise	Materials	Minutes
Introducing the Read-Aloud	**What Do We Already Know?**		10
	Making Predictions About the Read-Aloud		
	Purpose for Listening		
Presenting the Read-Aloud	**Garbage**	Earth Hat	10
Discussing the Read-Aloud	**Comprehension Questions**		10
	Word Work: Hazardous		5
	Complete Remainder of the Lesson Later in the Day		
Extensions	**Image Card Review**	Image Cards 1–7;1 chart paper, chalkboard, or whiteboard	15

Garbage

2A

Introducing the Read-Aloud — *10 minutes*



What Do We Already Know?

Show image 1A-1: Earth from outer space

Ask students to identify what this photograph shows. Remind students that the planet Earth is made up of three substances. Point to the brown and green areas shown on the image of the earth, and prompt students to identify these areas as land. Point to the blue areas, and prompt students to identify these areas as 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. Now, assist students in identifying why these substances are important and how living things use them.

Making Predictions About the Read-Aloud

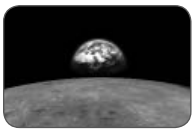
Tell students that the title for today's read-aloud is "Garbage." Ask, "What do you think garbage has to do with taking care of the earth?" Point to a trash can in your classroom, and ask students to make predictions about what they think happens to this garbage after it is thrown out in this trash can.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

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.

Note: Remember to put on your Earth Hat to read the read-aloud, and remind students that in the read-aloud, Earth will be pretending to "talk" to them.

Presenting the Read-Aloud **10** *minutes*



Garbage

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? [1]

1 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.** [2]

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.

2 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?

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? [3]

3 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. [4]

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!

4 A landfill is a place where garbage is dumped and buried.

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, 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.

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. [5]

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

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** [6] gases and chemicals in the area. The bad gases and chemicals go back into the soil and air, and can even get into the water supply

6 *Hazardous* means dangerous. Gases are in the air; we can't see them.

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.[7]

7 [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?

Discussing the Read-Aloud **15** *minutes*

Comprehension Questions **10** *minutes*

If students have difficulty responding to questions, reread pertinent passages of the read-aloud and/or refer to specific images. If students give one-word answers and/or fail to use read-aloud or domain vocabulary in their responses, acknowledge correct responses by expanding students' responses, using richer and more complex language. Ask students to answer in complete sentences by having them restate the question in their responses.

1. *Literal* What is the main topic of the read-aloud? (garbage)
2. *Literal* What are some other names for garbage? (trash, waste, junk, rubbish)
3. *Literal* Who creates all the trash on Earth? (people)
4. *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.)
5. *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.)
6. *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.)

7. *Inferential* Why is it important to think about where our garbage goes? (Too much garbage makes Earth a dirtier, less healthy place.)

[Please continue to model the *Think Pair Share* process for students, as necessary, and scaffold students in their use of the process.]

I am going to ask a question. I will give you a minute to think about the question. Then I will ask you to turn to your neighbor and discuss the question. Finally, I will call on several of you to share what you discussed with your partner.

8. *Evaluative* ***Think Pair Share:*** What can you do to create less garbage? (Answers may vary.)
9. After hearing today's read-aloud and questions and answers, do you have any remaining questions? [If time permits, you may wish to allow for individual, group, or class research of the text and/or other resources to answer these questions.]

Word Work: Hazardous

5 *minutes*

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.
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. Directions: 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."

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

Complete Remainder of the Lesson Later in the Day

Garbage

2B

Extensions — *15 minutes*

Image Card Review

Display Image Cards 1–7 in random order, from left to right on a chalkboard ledge or taped to a whiteboard or chart paper. 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.

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 them 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. Also, encourage the use of temporal vocabulary to help in introducing and sequencing events and ideas: *first, then, next, later, finally,* etc.

Natural Resources

3

☑ *Lesson Objectives*

Core Content Objectives

Students will:

- ✓ Explain that natural resources are things found in nature that are valuable and of great importance to people
- ✓ Identify key natural resources, and describe how people use them

Language Arts Objectives

The following language arts objectives are addressed in this lesson. Objectives aligning with the Common Core State Standards are noted with the corresponding standard in parentheses. Refer to the Alignment Chart for additional standards addressed in all lessons in this domain.

Students will:

- ✓ With prompting and support, identify the main topic and retell key details from "Natural Resources" (RI.K.2)
- ✓ Demonstrate understanding of frequently occurring verbs, such as *conserve,* by relating them to their opposites (antonyms) (L.K.5b)
- ✓ Prior to listening to "Natural Resources," identify orally what they have learned about the earth

Core Vocabulary

conserve, *v.* To protect something; to save 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

natural resources, *n.* Things found in nature, such as land, water, and air, that are valuable and of great importance to people
Example: One example of Earth's natural resources is trees, which are used to make lumber to build houses and also to make paper.
Variation(s): natural resource

oxygen, *n.* The part of the air we breathe that is needed to keep people alive
Example: We need to breathe in enough oxygen to stay healthy.
Variation(s): none

At a Glance	Exercise	Materials	Minutes
Introducing the Read-Aloud	**What Do We Already Know?**	KWL chart	10
	Essential Background Information or Terms		
	Purpose for Listening		
Presenting the Read-Aloud	**Natural Resources**	Earth Hat	10
Discussing the Read-Aloud	**Comprehension Questions**		10
	Word Work: Conserve		5
	Complete Remainder of the Lesson Later in the Day		
Extensions	**Natural Resources**	Instructional Master 3B-1	15

Natural Resources

3A

Introducing the Read-Aloud *10 minutes*

What Do We Already Know?

Use the KWL chart started in the first lesson to 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 trash, and add their comments to the 'L' column of the chart. Remember to save the chart paper which will be used throughout the domain.

Essential Background Information or Terms

Tell students that today they are going to hear a read-aloud about the natural resources that come from Earth. Explain that natural resources are things found in nature, such as land, water, and air, that are valuable and very important to people. People use natural resources every day. For example, people use water to drink, to wash things, and to make other things we need, such as medicine.

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.

Note: Remember to put on your Earth Hat to present the read-aloud, and remind students that in the read-aloud, Earth will be pretending to "talk" to them.

Presenting the Read-Aloud — *10 minutes*

Natural Resources

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? [1] 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. [2]

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. [3]

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. [4] Water and trees are two examples of natural resources that are very important and valuable to people.

1 The continents are the seven largest pieces of land on Earth.

2 [Point out Africa, Asia, Europe, and Italy in the picture.]

3 [Point out the Sahara Desert to students.]

4 [Pause for students to respond.]

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

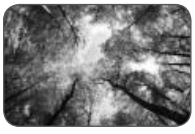
As I just said, one natural resource is water. Of course, one way we use water is to drink it just as it is. Other things we drink, such as juice, soda, and tea also contain water. In what other ways is water a resource? We use water for baths, washing dishes, brushing our teeth, cooking, and watering 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.[5] 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.

5 [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.[6] The more trees there are, the cleaner the air will be. If the air is too dirty, though, even the trees will get sick.

6 Remember, we learned about this when we learned about plants?

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

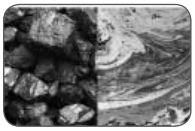
This picture was taken on a farm. What do you see? You can call it dirt, if you want, but farmers call it soil. Soil is a natural resource, and it's where farmers plant their crops. Soil is made up partly of the **decayed** or rotten parts of dead plants and creatures. Worms help to turn the dead things into new soil. It can take about one thousand years to make one inch of good soil.[7] Without soil, you wouldn't have plants or vegetables!

7 [Gesture with your fingers to illustrate one inch.]

Show image 3A-8: School of fish

Here is a school of fish.[8] Fish are important natural resources, too. Why? Because some people and animals eat them. In fact, some animals eat nothing but fish!

8 A school is another name for a group of fish. What other kind of school do you know about?



Show image 3A-9: Coal and oil

Do you know what these two natural resources are?[9] 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.

9 [Point to the illustrations.]

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.[10] I'll also teach you that using some natural resources too much can actually hurt the earth, and none of us want that, right?

10 To conserve means to protect or save.

Discussing the Read-Aloud **15** *minutes*

Comprehension Questions **10** *minutes*

If students have difficulty responding to questions, reread pertinent passages of the read-aloud and/or refer to specific images. If students give one-word answers and/or fail to use read-aloud or domain vocabulary in their responses, acknowledge correct responses by expanding students' responses, using richer and more complex language. Ask students to answer in complete sentences by having them restate the question in their responses.

1. *Literal* What is the main topic of the read-aloud? (natural resources)
2. *Literal* What is a natural resource? (something in nature that is important to people and which they can use to make other things)
3. *Literal* Name some examples of natural resources that you heard about. (soil/land, trees, water, air, coal, oil, fish)
4. *Inferential* How do people use some of these natural resources? (We use trees to make paper, cardboard, and wood. We use water to drink, to take baths, and to water gardens. We breathe the air.)
5. *Inferential* How do trees and plants help keep the air clean? (They take in dirty air and give off clean air.)
6. *Literal* Name two natural resources that can be used to make energy and fuel. (coal and oil)

[Please continue to model the Think Pair Share process for students, as necessary, and scaffold students in their use of the process.]

I am going to ask a question. I will give you a minute to think about the question. Then I will ask you to turn to your neighbor and discuss the question. Finally, I will call on several of you to share what you discussed with your partner.

7. *Evaluative* *Think Pair Share:* What do you think would happen if there was no more clean water on Earth? (Answers may vary.)
8. After hearing today's read-aloud and questions and answers, do you have any remaining questions? [If time permits, you may wish to allow for individual, group, or class research of the text and/or other resources to answer these questions.]

Word Work: Conserve *5 minutes*

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. Someone might conserve water by turning off the faucet when they brush their teeth, or people might conserve nature by protecting natural land and not building on it.
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. Directions: 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."

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

Complete Remainder of the Lesson Later in the Day

Natural Resources

3B

Extensions — *15 minutes*

⑩ Natural Resources (Instructional Master 3B–1)

Remind students that natural resources are materials that come from nature and can be used to make many things. 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."

Directions: Look at Instructional Master 3B-1. I am going to say some things that are made from natural resources or that use natural resources. (Point to the left column.) For each item, you will circle the natural resource that it came from. (Point to the right column.) I will read the names of the resources in each row for you.

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 Instructional Master, 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, which is letter 'C'."

Reduce, Reuse, Recycle 4

☑ *Lesson Objectives*

Core Content Objectives

Students will:

- ✓ Recognize the phrase "Reduce, reuse, recycle," and explain how doing these three things can help to conserve natural resources
- ✓ Identify the recycling symbol and explain that recycled materials are made from items that have already been used and otherwise would have been garbage

Language Arts Objectives

The following language arts objectives are addressed in this lesson. Objectives aligning with the Common Core State Standards are noted with the corresponding standard in parentheses. Refer to the Alignment Chart for additional standards addressed in all lessons in this domain.

Students will:

- ✓ With prompting and support, orally compare and contrast a picture of a green field and blue sky and a picture of a landfill (RI.K.9)
- ✓ Create a drawing of a natural resource, naming the topic and providing some details (W.K.2)
- ✓ With guidance and support, respond to questions and suggestions from peers and add details to a drawing of a natural resource (W.K.5)
- ✓ Ask questions to clarify directions for Interactive Illustrations following "Reduce, Reuse, and Recycle" (SL.K.3)
- ✓ Add drawings to descriptions of how to conserve a natural resource to provide additional detail (SL.K.5)

- ✓ Demonstrate understanding of frequently occurring verbs, such as *reduce,* by relating them to their opposites (antonyms) (L.K.5b)
- ✓ Prior to listening to "Reduce, Reuse, Recycle," identify orally what they learned about garbage and natural resources

Core Vocabulary

action, *n.* Something you do
Example: The actors began to perform after the director said, "Action!"
Variation(s): actions

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
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, and that will help save trees.
Variation(s): reduces, reduced, reducing

At a Glance	Exercise	Materials	Minutes
Introducing the Read-Aloud	**What Have We Already Learned?**	Image Card 5	10
	Purpose for Listening		
Presenting the Read-Aloud	**Reduce, Reuse, Recycle**	Earth Hat	10
Discussing the Read-Aloud	**Comprehension Questions**		10
	Word Work: Reduce		5
	Complete Remainder of the Lesson Later in the Day		
Extensions	**Interactive Illustrations**	drawing paper, drawing tools	15
	Vocabulary Instructional Activity: Symbol		

Reduce, Reuse, Recycle

4A

Introducing the Read-Aloud *10 minutes*

What Have We Already Learned?

Review with students the concept of natural resources as things that come from nature (the earth) and which are very important and valuable to people. Refer to images from the previous read-aloud as needed, and encourage students to give examples of natural resources.

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 students Image Card 5, and remind them that sometimes landfills have to be closed because there is no more space for the garbage. Also remind them landfills can be dangerous places because of the hazardous gases and chemicals from the decaying trash that can get into the land, water, and air.

Now ask students, "Do you think there are any other things that can be done with garbage so that there are fewer and/or smaller landfills?" Remember to 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. Say, "We are going to learn how to reduce, reuse, and recycle." Have them repeat the words *reduce, reuse,* and *recycle* after you.

Purpose for Listening

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

Note: Remember to put on your Earth Hat to present the read-aloud, and remind students that in the read-aloud, Earth will be pretending to "talk" to them.

Presenting the Read-Aloud — **10** *minutes*

Reduce, Reuse, Recycle

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

➡ **Show image 4A-1: Earth covered by trash** [1]

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!

2 [Pause for students to respond.] Place is where something is located. *Place* also means to put.

Where does all that trash end up? Can you remember the name of the <u>place</u> in this picture? [2] It's a landfill. There is an incredible amount of trash buried in landfills, but you can all help.

3 How is this picture different from the picture of the landfill?

➡ **Show image 4A-3: Green field and blue sky** [3]

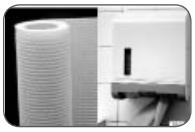
Wouldn't it be nice if we could keep as much land as possible clean and green, like the place in this picture? Can you think of ways you can cut back on the amount of trash you throw away?

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. [4]

Those three words are ***reduce,*** *reuse,* and ***recycle.*** Say them a few times. [5]

4 Putting someone's words into action means acting on, or doing, what he or she says.

5 [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?[6] 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?*

6 [Point to the illustration and have students describe what they see.]

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.

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.

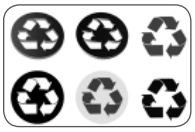
Show image 4A-5: Child's drawing

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.

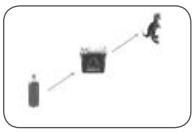
Reducing and reusing are two important ways to make sure that you don't send too much trash off to the landfill, but the very best way is by recycling.



Show image 4A-6: Recycling symbols

This is the recycling symbol.[7] The arrows in this symbol remind you that many things can actually be made into other things.

7 A symbol is a picture that represents a word or idea.



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![8]

8 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! [9]

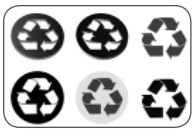
9 [Have students chant these three words together a few more times.]

Discussing the Read-Aloud *15 minutes*

Comprehension Questions *10 minutes*

If students have difficulty responding to questions, reread pertinent passages of the read-aloud and/or refer to specific images. If students give one-word answers and/or fail to use read-aloud or domain vocabulary in their responses, acknowledge correct responses by expanding students' responses, using richer and more complex language. Ask students to answer in complete sentences by having them restate the question in their responses.

1. *Literal* Which creatures generate trash? (only people)
2. *Literal* What are the three things you can do to conserve natural resources? (reduce, reuse, recycle)
3. *Inferential* Describe one way to reduce the amount you use of something. (I can use fewer paper towels in the bathroom.)
4. *Inferential* Describe one way to reuse something. (I can use the other side of a piece of paper to draw something.)



Show image 4A-6: Recycling symbols

5. *Literal* What does this symbol mean? (recycle)
6. *Inferential* What are recycled materials? (things that have already been used, but are made into something new instead of being thrown away into the garbage)
7. *Inferential* What natural resource do you save if you reuse and recycle paper? (trees)

[Please continue to model the *Think Pair Share* process for students, as necessary, and scaffold students in their use of the process.]

I am going to ask a question. I will give you a minute to think about the question. Then I will ask you to turn to your neighbor and discuss the question. Finally, I will call on several of you to share what you discussed with your partner.

8. *Evaluative* ***Think Pair Share:*** Why is it important to reduce, reuse, and recycle? (These three actions help to conserve natural resources; they reduce the amount of trash in landfills.)
9. After hearing today's read-aloud and questions and answers, do you have any remaining questions? [If time permits, you may wish to allow for individual, group, or class research of the text and/or other resources to answer these questions.]

Word Work: Reduce

5 *minutes*

1. In the read-aloud you heard, "When you *reduce* the amount you use of something, you use less of it."
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. Directions: 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."

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

Complete Remainder of the Lesson Later in the Day

Reduce, Reuse, Recycle

4B

Extensions

***15** minutes*

Interactive Illustrations

Give every student a sheet of paper folded in half. On one half, have each student draw a picture of a natural resource (e.g., trees, water, air, coal, fish, oil). Then, pair each student with a partner and ask students to trade illustrations.

Tell students: "Asking questions is one way to make sure everyone knows what to do. Think of a question you can ask your neighbor about the directions I have just given you. For example, you could ask, 'What do we draw a picture of?' Turn to your neighbor and ask your own question now. I will call on several of you to share your questions with the class."

Have students talk about their pictures with their partners for a minute, and then ask their partner for suggestions of ways to conserve that natural resource. For example, if the natural resource is trees, they might suggest, "Use fewer paper towels."

Using the second section of their paper, have each student draw a picture of the suggestion their partner had for conserving the natural resource.

Allow several students to share and discuss their own and their partner's illustrations. Have partners share the advice they have for reducing waste with the class. As students discuss the illustrations, remember to repeat and expand upon each response, using richer and more complex language, including, if possible, any read-aloud vocabulary.

Vocabulary Instructional Activity

Word Work: Symbol

Show image 4A-6: Recycling symbols

1. In the read-aloud today you heard, "This is the recycling *symbol*."
2. Say the word *symbol* with me.
3. A symbol is a picture that represents, or stands for, a word or idea.
4. The smiling face is the symbol we circle to represent the right answer on our assessments.
5. Tell about a symbol that you have seen. Try to use the word *symbol* when you tell about it. [Ask two or three students. If necessary, guide and/or rephrase students' responses: "I have seen a symbol that stands for . . ."] (If students have trouble thinking of examples, you might suggest symbols they might see at a crosswalk, on trash cans, or on bathroom doors, etc.)
6. What's the word we've been talking about?

Use a *Drawing* activity for follow-up. Directions: Draw a symbol that you know of, or make up your own symbol, that represents, or stands for, a word or idea.

Recycle! Recycle! Recycle! 5

☑ *Lesson Objectives*

Core Content Objectives

Students will:

- ✓ Identify recycling as a way to conserve natural resources.
- ✓ Explain the process of recycling materials from home to a recycling factory
- ✓ Identify common recyclable materials, including glass, plastic, aluminum, cardboard, and paper

Language Arts Objectives

The following language arts objectives are addressed in this lesson. Objectives aligning with the Common Core State Standards are noted with the corresponding standard in parentheses. Refer to the Alignment Chart for additional standards addressed in all lessons in this domain.

Students will:

- ✓ With prompting and support, identify the main topic and retell key details from "Recycle! Recycle! Recycle!" (RI.K.2)
- ✓ With prompting and support, describe recycling and what happens at a recycling center in proper sequence (RI.K.3)
- ✓ With prompting and support, describe the role of an author and illustrator in a nonfiction/informational text (RI.K.6)
- ✓ Explain the meaning of "a place for everything and everything in its place" and use in appropriate contexts (L.K.6)
- ✓ Prior to listening to "Recycle! Recycle! Recycle!," identify orally what they learned about conserving natural resources

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 or features
Example: He sorted his crayons into reds, blues, yellows, and greens.
Variation(s): sort, sorts, sorting

At a Glance	Exercise	Materials	Minutes
Introducing the Read-Aloud	**What Have We Already Learned?**	bin(s) of recyclable materials (aluminum drink cans, metal soup cans, plastic bottles, paper products)	10
	Purpose for Listening		
Presenting the Read-Aloud	**Recycle! Recycle! Recycle!**	Earth Hat	10
Discussing the Read-Aloud	**Comprehension Questions**		10
	Word Work: Solution		5
 **Complete Remainder of the Lesson Later in the Day**			
Extensions	**Sayings and Phrases: A Place for Everything, and Everything in Its Place**		15
	Domain-Related Trade Book	trade book	

Recycle! Recycle! Recycle! 5A

Introducing the Read-Aloud **10** *minutes*

What Have We Already Learned?

Remind students that in the previous read-aloud they learned three ways that they could help conserve natural resources. Ask students to give examples of natural resources and then identify the three strategies discussed for conserving these resources—reduce, reuse, and recycle. Remind students that the word *reduce* in this phrase is to remind them to try to use less or fewer things that come from natural resources. Ask students to give specific examples of what they can do to reduce their use of these resources. Next, review with students that the word *reuse* in the phrase is to remind them to use things over and over again; ask students to give a few examples. Finally, remind students that 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.

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. Then, show some of the items in the bin(s) to provide examples of the types of materials that can be recycled. Ask students to name some recyclables and discuss whether they save any of these items either at home or at school. Remember to repeat and expand upon each response, using richer and more complex language, including, if possible, any read-aloud vocabulary.

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.

Note: Remember to put on your Earth Hat to present the read-aloud, and remind students that in the read-aloud, Earth will be pretending to "talk" to them.

Presenting the Read-Aloud **10** *minutes*

Recycle! Recycle! Recycle!

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

1 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.

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.

2 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.

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. [2]

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? [3]

3 [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. [4]

4 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. [5] 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

5 So, plastic things go to a plastics recycling factory, and aluminum cans go to an aluminum recycling factory.

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.

Show image 5A-7: Glass bottles

What are these bottles made of?[6] 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.

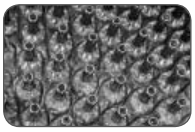
6 [Pause for students to respond.]

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?

Discussing the Read-Aloud **15** *minutes*

Comprehension Questions **10** *minutes*

If students have difficulty responding to questions, reread pertinent passages of the read-aloud and/or refer to specific images. If students give one-word answers and/or fail to use read-aloud or domain vocabulary in their responses, acknowledge correct responses by expanding students' responses, using richer and more complex language. Ask students to answer in complete sentences by having them restate the question in their responses.

1. *Literal* What is the main topic of the read-aloud? (recycling)
2. *Literal* What is recycling? (Instead of throwing something away and having it sent to a landfill, you save it so that it can be recycled and reused to make something new.)
3. *Literal* Name some things you can recycle. (glass, plastic, aluminum, paper)
4. *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.)
5. *Evaluative* [Show images 5A-8 through 5A-10.] Describe the steps taken to recycle glass. (The glass gets crushed; next, it is melted; then, people use the melted glass to make new glass items.)

[Please continue to model the *Think Pair Share* process for students, as necessary, and scaffold students in their use of the process.]

I am going to ask a question. I will give you a minute to think about the question. Then I will ask you to turn to your neighbor and discuss the question. Finally, I will call on several of you to share what you discussed with your partner.

6. *Evaluative* Is it important to recycle? Why or why not? (Answers may vary but should include that recycling helps reduce the size of landfills and conserves natural resources.)
7. After hearing today's read-aloud and questions and answers, do you have any remaining questions? [If time permits, you may wish to allow for individual, group, or class research of the text and/or other resources to answer these questions.]

Word Work: Solution

5 minutes

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. Directions: 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."

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

Complete Remainder of the Lesson Later in the Day

Recycle! Recycle! Recycle! 5B

Extensions *15 minutes*

Sayings and Phrases: A Place for Everything, and Everything in Its Place

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.

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. 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 give additional examples, using the saying.

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—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."

Domain-Related Trade Book

Refer to the list of recommended trade books in the Introduction at the front of this Anthology, 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 the title page. As you read, use the same strategies that you have been using when reading the read-aloud selections in this Anthology—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.

Composting

6

☑ *Lesson Objectives*

Core Content Objectives

Students will:

- ✓ Sequence what happens to a piece of discarded food from the table to the compost pile to the garden
- ✓ Explain that composting is a type of recycling
- ✓ Identify foods that can be composted

Language Arts Objectives

The following language arts objectives are addressed in this lesson. Objectives aligning with the Common Core State Standards are noted with the corresponding standard in parentheses. Refer to the Alignment Chart for additional standards addressed in all lessons in this domain.

Students will:

- ✓ With prompting and support, identify the main topic and retell key details from "Composting" (RI.K.2)
- ✓ With prompting and support, describe the steps for composting in the proper sequence (RI.K.3)
- ✓ Recount the steps for composting in the proper sequence, including what items can and cannot be composted (W.K.3)
- ✓ With prompting and support, sort items based on information from the read-aloud "Composting" (W.K.8)
- ✓ Discuss personal responses to whether their family composts and connect that to the family in the read-aloud "Composting"
- ✓ While listening to "Composting," orally predict where leftover food goes and what happens after a tomato is picked, based on text heard thus far, and then compare the actual outcome to the prediction

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

At a Glance	Exercise	Materials	Minutes
Introducing the Read-Aloud	**What Have We Already Learned?**	KWL chart	10
	Essential Background Information or Terms		
	What Do We Know?		
	Purpose for Listening		
Presenting the Read-Aloud	**Composting**	Earth Hat	10
Discussing the Read-Aloud	**Comprehension Questions**		10
	Word Work: Compost		5
	Complete Remainder of the Lesson Later in the Day		
Extensions	**Composting**	Image Cards 8–11; Instructional Master 6B-1; scissors, glue or tape	15
Take-Home Material	**Family Letter**	Instructional Master 6B-2	*

Composting

6A

Introducing the Read-Aloud *10 minutes*

What Have We Already Learned?

Review the KWL chart that was created 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.

Especially review the 'K' and 'L' columns that were created earlier, emphasizing in particular the topics related to recycling. Remember to save the chart paper, which will be used throughout the domain.

Essential Background Information or Terms

Tell students that today they are going hear a read-aloud about another type of recycling; however, 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! This type of recycling of leftover foods is called composting. Explain to students 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. 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.

What Do We Know?

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. Then ask students, "What are other ways in which your family pitches in to keep Earth clean and healthy? Do you remember the three R's?" Encourage them 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. Remember to repeat and expand upon each response, using richer and more complex language, including, if possible, any read-aloud vocabulary.

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. Remind students to listen carefully to the read-aloud to find out more about today's topic: composting.

Note: Remember to put on your Earth Hat to present the read-aloud, and remind students that in the read-aloud, Earth will be pretending to "talk" to them.

Presenting the Read-Aloud **10** *minutes*

Composting

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

1 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.** [2] Mrs. Smith will put these leftovers in reusable containers and then in the refrigerator for lunch or a snack the next day.

2 Leftovers are the uneaten foods that remain after a meal.

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,[3] 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?[4]

3 or the skins peeled off the carrots and cucumbers

4 [Allow time for students to guess what the Smiths will do with the scraps in the pail.]

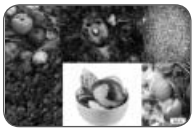
Show image 6A-5: Chris dumping food scraps onto compost pile

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.[5]

5 Nutrients, like vitamins and minerals, help make living things grow. What kinds of living things could grow in soil that is full of nutrients?

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.



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.[6]

6 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. [7]

7 [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. [8] Heat and moisture make the materials in the compost bin break down even faster. [9] 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.

8 With the warm heat from the sun and the water, it's almost like "cooking" everything that is in the compost pile!

9 Another way of saying that the materials break down is to say that the materials decay, rot, or decompose.

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? [10]

10 [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.

Discussing the Read-Aloud **15** *minutes*

Comprehension Questions **10** *minutes*

1. *Literal* What is the main topic of the read-aloud? (composting)
2. *Literal* Why are plants important? (Plants provide food for people, bees, and other animals; plants help keep the air clean.)
3. *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.)
4. *Literal* Name a few things that you can compost. (vegetables, spaghetti, coffee grounds, and leaves)
5. *Literal* Name a few things that you should not compost. (meat, oil, and buttery foods)
6. *Inferential* Why shouldn't you compost meats and oils? (They make the compost smell bad and attract wild animals.)
7. *Inferential* Why is compost good for gardens? (Compost has lots of nutrients that will help the plants grow big and strong.)
8. *Evaluative* Describe the process of composting. (Sort leftovers; dump foods to be composted in a bin outside; water and mix the decaying scraps with a shovel or a rake; wait for the food to decompose into soil; use the soil in your garden to grow new plants.)

[Please continue to model the *Think Pair Share* process for students, as necessary, and scaffold students in their use of the process.]

I am going to ask a question. I will give you a minute to think about the question. Then I will ask you to turn to your neighbor and discuss the question. Finally, I will call on several of you to share what you discussed with your partner.

9. *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.)

10. After hearing today's read-aloud and questions and answers, do you have any remaining questions? [If time permits, you may wish to allow for individual, group, or class research of the text and/or other resources to answer these questions.]

Word Work: Compost *5 minutes*

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 decayed food that turns 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. Directions: 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."

1. steak (That would not make good compost.)
2. shredded lettuce (That would make good compost.)
3. buttered toast (That would not make good compost.)
4. spaghetti with meatless tomato sauce (That would make good compost.)
5. leftover salad without dressing (That would make good compost.)
6. hot dogs (That would not make good compost.)
7. the skins or peels from vegetables (That would make good compost.)

Complete Remainder of the Lesson Later in the Day

Composting

6B

Extensions — *15 minutes*

⑩ Composting (Instructional Master 6B-1)

Remind students of the steps in the process of composting. Use Image Cards 8 (Sorting Foods for Composting), 9 (Putting Food into the Compost Bin), 10 (Turning the Compost), and 11 (Using the Compost to Grow Tomatoes) to review the process.

Give each student a copy of Instructional Master 6B-1.

Explain to students that this worksheet has pictures of the steps in the process of composting. Have students cut out the four pictures. Next, have them 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. Check to see if students are able to correctly sequence the pictures. Have students glue or tape the pictures on paper once they have been sequenced. As students complete this activity, have them work with a partner to recount the process of composting, referring to their sequenced pictures. You may also want to have students write or dictate words or sentences that describe the pictures and recount the process.

Take-Home Material

Family Letter

Send home Instructional Master 6B-2.

Pausing Point

PP

Note to Teacher

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

You may have students do any combination of the activities listed below, but it is highly recommended that you use the Mid-Domain Student Performance Task Assessment to assess students' knowledge of taking care of the earth. The other activities may be done in any order. 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:

- ✓ Explain why people have a special responsibility to take care of the earth
- ✓ Explain that Earth is composed of natural resources (land, water, and air), and that humans, plants, and animals depend on Earth's natural resources to live
- ✓ Explain different types of pollution, including garbage, and how most types of pollution are caused by people
- ✓ Explain what happens to garbage from its creation to being dumped in the landfill; to recyclable materials from home to a recycling factory; and to discarded food from the table to the compost pile to the garden
- ✓ Identify the recycling symbol and the phrase "reduce, reuse, and recycle," and understand that recycled materials are made from items that have already been used and otherwise would be garbage
- ✓ Identify common recyclable materials, including glass, plastic, aluminum, cardboard, and paper; and that composting is a type of recycling

- ✓ Identify possible solutions for the problems of garbage, pollution, and conserving natural resources

Student Performance Task Assessment

⑩ Sorting Recyclable Items (Instructional Master 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 look at Instructional Master 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 worksheet. 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?"

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. 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.

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 Introduction. 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. 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 it 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).

Pollution

7

☑ *Lesson Objectives*

Core Content Objectives

Students will:

- ✓ Explain that land, air, and water all suffer from different types of pollution, and most types of pollution are caused by people
- ✓ Explain that if people are careful and creative, they can help reduce pollution

Language Arts Objectives

The following language arts objectives are addressed in this lesson. Objectives aligning with the Common Core State Standards are noted with the corresponding standard in parentheses. Refer to the Alignment Chart for additional standards addressed in all lessons in this domain.

Students will:

- ✓ With prompting and support, identify the main topic and retell key details from "Pollution" (RI.K.2)
- ✓ With prompting and support, describe the three types of pollution from the read-aloud (RI.K.3)
- ✓ With prompting and support, orally compare and contrast pictures of a clean beach and a dirty beach (RI.K.9)
- ✓ With assistance, update facts and information about what they know, wonder, and would like to learn about taking care of the earth (W.K.8)
- ✓ Identify new meanings for familiar words, such as *litter,* and apply them accurately (L.K.4a)
- ✓ Prior to listening to "Pollution," identify orally what they learned about taking care of the earth

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.* The introduction of something harmful into 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

At a Glance	Exercise	Materials	Minutes
Introducing the Read-Aloud	**Know-Wonder-Learn Chart**	KWL chart	10
	Essential Background Information or Terms	KWL chart	
	Purpose for Listening		
Presenting the Read-Aloud	**Pollution**	Earth Hat	10
Discussing the Read-Aloud	**Comprehension Questions**		10
	Word Work: Toxic		5
	Complete Remainder of the Lesson Later in the Day		
Extensions	**Know-Wonder-Learn Chart**	KWL chart	15
	Multiple Meaning Word Activity: Litter	Poster 4M: Litter	

Pollution

7A

Introducing the Read-Aloud *10 minutes*

Know-Wonder-Learn Chart

Review the KWL chart that was created 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. Then ask students to tell you what else they have learned so far about taking care of the earth. Remind them about composting. Reread small sections of Lesson 6 aloud, or show the illustrations, as necessary, to help students check the accuracy of their responses.

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. Remember to save the chart paper, which will be used throughout the domain.

Essential Background Information or Terms

Remind students that Earth is made up of land, water, and air. 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. 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, “What do you 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.

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.

Note: Remember to put on your Earth Hat to present the read-aloud, and remind students that in the read-aloud, Earth will be pretending to “talk” to them.

Presenting the Read-Aloud — *10 minutes*

Pollution

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? [1]

1 [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.

Show image 7A-3: Clean beach, dirty beach [2]

2 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. [3]

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

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[4]

4 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.[5]

5 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 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.[6] 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.

6 *Pitch in* means to join in and help out doing something.

Discussing the Read-Aloud **15** *minutes*

Comprehension Questions **10** *minutes*

1. *Literal* What is the main topic of the read-aloud? (pollution)
2. *Literal* What three types of pollution did you hear about today? [You may want to show images from the read-aloud to help students remember.] (land, water, and air pollution)
3. *Literal* Which creatures on the planet cause most of the pollution? (people)
4. *Inferential* Why is littering a bad thing? (It can be harmful to animals and plants; some litter is toxic.)
5. *Inferential* What can happen if animals or people drink polluted water? (They can become sick.)
6. *Evaluative* What kinds of problems do you think smog can cause? (It can make birds sick; it can make people who breathe the air sick; etc.)

[Please continue to model the *Think Pair Share* process for students, as necessary, and scaffold students in their use of the process.]

I am going to ask a question. I will give you a minute to think about the question. Then I will ask you to turn to your neighbor and discuss the question. Finally, I will call on several of you to share what you discussed with your partner.

7. *Evaluative* ***Think Pair Share:*** Describe one solution to pollution. (Drive less; make better factories; don't litter; etc.)
8. After hearing today's read-aloud and questions and answers, do you have any remaining questions? [If time permits, you may wish to allow for individual, group, or class research of the text and/or other resources to answer these questions.]

Word Work: Toxic

***5** minutes*

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.
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. Directions: 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."

1. drinking clean water (That is not toxic.)
2. breathing the polluted air that comes out of a factory (That could be toxic.)
3. eating an orange from a local farm (That is not toxic.)
4. drinking polluted water from a stream that a factory dumps chemicals into (That could be toxic.)

Complete Remainder of the Lesson Later in the Day

Pollution

7 B

Extensions — *15 minutes*

Know-Wonder-Learn Chart

Review the 'K' and 'W' columns of the KWL chart that were created earlier. Ask students what they learned in the read-aloud, and record their responses in the 'L' column. Reread small sections of the text aloud, as necessary, to help students check the accuracy of their responses. 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. Remember to save the chart paper, which will be used throughout the domain.

Multiple Meaning Word Activity

Sentence in Context: Litter

1. [Show Poster 4M: Litter.] In the read-aloud you heard, "Litter is trash that was not put in the right place." 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.]
2. *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.]

3. *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.]

4. Now with your neighbor, make a sentence for each meaning of *litter.* I will call on a few of you to share your responses. Try to answer in complete sentences. [Call on a few students to share their answers.]

Air Pollution

8

☑ *Lesson Objectives*

Core Content Objectives

Students will:

- ✓ Explain that people have a special responsibility to reduce air pollution
- ✓ Explain how air pollution is harmful to animals, plants, and people
- ✓ Identify examples of air pollution
- ✓ Explain how to reduce air pollution by conserving natural resources

Language Arts Objectives

The following language arts objectives are addressed in this lesson. Objectives aligning with the Common Core State Standards are noted with the corresponding standard in parentheses. Refer to the Alignment Chart for additional standards addressed in all lessons in this domain.

Students will:

- ✓ With prompting and support, identify the main topic and retell key details from "Air Pollution" (RI.K.2)
- ✓ With prompting and support, describe the role of illustrator in a nonfiction/informational text (RI.K.6)
- ✓ Demonstrate understanding of frequently occurring prepositions, such as *in* and *out*, and *over* and *under*

Core Vocabulary

appliance, *n.* A piece of equipment or a machine designed to do a certain job, usually used in the home
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.* Around the world or worldwide
Example: Pollution is a global problem.
Variation(s): none

harmed, *v.* Hurt
Example: The mouse hid quickly and was not harmed by the cat.
Variation(s): harm, harms, harming

At a Glance	Exercise	Materials	Minutes
Introducing the Read-Aloud	**What Have We Already Learned?**		10
	Purpose for Listening		
Presenting the Read-Aloud	**Air Pollution**	Earth Hat	10
Discussing the Read-Aloud	**Comprehension Questions**		10
	Word Work: Harmed		5
	Complete Remainder of the Lesson Later in the Day		
Extensions	**Syntactic Awareness Activity: Prepositions**	classroom objects; 1	15

Air Pollution

8A

Introducing the Read-Aloud — *10 minutes*

What Have We Already Learned?

Remind students that in the last read-aloud, they heard about different types of pollution: land, water, and air pollution. Ask them to provide an example of each type of pollution, referring to the images from Lesson 7, as necessary. 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, "How do you think smog is harmful to the health of animals, plants, and people?" Remember to 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.

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.

Note: Remember to put on your Earth Hat to present the read-aloud, and remind students that in the read-aloud, Earth will be pretending to "talk" to them.

Presenting the Read-Aloud **10** *minutes*

Air Pollution

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? [1]

1 [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!

Show image 8A-2: Lungs [2]

2 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. [3]

3 [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

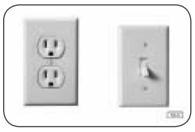
Here's a picture of a big American city. Let's take a close look at it. If you look at the background, where there are large buildings, you can see that the air looks kind of foggy and clouded. Look even closer, beyond the city, and you can see a thin brownish-yellow strip of air, just below the light-blue 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' 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. [4]

4 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. [5]

5 [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? [6] 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. [7] 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.

6 [Pause for students to respond.]

7 Remember, we learned about mining coal when we read about blacksmiths?

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.[8] But coal-fired power plants can generate large amounts of air pollution.

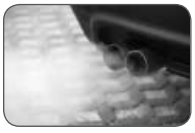
Do you see the electrical lines running out from this plant in the lower right corner of the picture?[9] Every time someone turns on a light, a computer, or any other electrical **appliance,**[10] there's a chance that the electricity is coming from a power plant like this one and, as a result, a little 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![11]

8 A coal-fired power plant is a factory that uses coal to make electricity.

9 [If possible, tell students what type of power is used in your community.]

10 or household machine

11 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?[12] 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.**

12 [Pause for students to respond.]

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

Show image 8A-9: Pumping gas

What's this person doing?[13] 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.

13 [Pause for students to respond.]

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.

Discussing the Read-Aloud **15** *minutes*

Comprehension Questions **10** *minutes*

1. *Literal* What is the main topic of the read-aloud? (air pollution)
2. *Literal* What part of your body do you breathe with? (lungs)
3. *Inferential* How does air pollution affect your lungs? (If you breathe in dirty air, it gets into your lungs and can make you sick.)
4. *Literal* What do you call the waste that comes out of the tailpipe of a car? (exhaust)
5. *Inferential* How is car exhaust bad for the earth? (It causes air pollution.)
6. *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.)
7. *Inferential* Air pollution is a global problem all around the world, not just in the place where the air pollution occurs. Why? (Wind blows dirty air from big cities to other places in the world.)
8. *Evaluative* What can people do so they don't have to drive their cars so much, which causes air pollution? (They can choose to walk, bike, and live closer to their work and school.)

[Please continue to model the Think Pair Share process for students, as necessary, and scaffold students in their use of the process.]

I am going to ask a question. I will give you a minute to think about the question. Then I will ask you to turn to your neighbor and discuss the question. Finally, I will call on several of you to share what you discussed with your partner.

9. *Evaluative* *Think Pair Share:* What can you do to reduce air pollution? (Use less electricity; walk or ride a bike instead of riding in a car.)

10. After hearing today's read-aloud and questions and answers, do you have any remaining questions? [If time permits, you may wish to allow for individual, group, or class research of the text and/or other resources to answer these questions.]

Word Work: Harmed

5 *minutes*

1. In the read-aloud you heard, "[T]he 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."
2. Say the word *harmed* with me.
3. *Harmed* means hurt.
4. You might be harmed if you fall down.
5. Tell about a situation in which Earth is harmed by things people do. It could be because of smog, littering, or other types of pollution. Try to use the word *harmed* when you tell about it. [Ask two or three students. If necessary, guide and/or rephrase students' responses: "Earth is harmed when..."]
6. What's the word we've been talking about?

Use a *Making Choices* activity for follow-up. Directions: If any of the things I say are examples of something or someone getting harmed, say, "They are harmed." If any of the things I say are examples of something or someone not getting harmed, say, "They are not harmed."

1. Someone safely crosses the road. (They are not harmed.)
2. Someone gets sick from drinking polluted water. (They are harmed.)
3. Two squirrels escape from a dog by climbing a tree. (They are not harmed.)
4. Someone falls down on an icy sidewalk and gets hurt. (They are harmed.)
5. A factory dumps chemicals into a river where fish live. (They are harmed.)

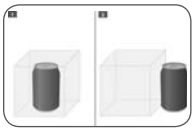
Complete Remainder of the Lesson Later in the Day

Extensions — 15 minutes

Syntactic Awareness Activity: Prepositions of Location (in, out, over, under)

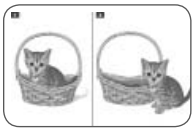
Directions: Today we are going to practice using words that show relationships between other words. We will practice using these small words—*in, out, over, under*—to help us describe where something is, or its place.

Note: There may be variations in the sentences created by your class. Allow for these variations and restate students' sentences so that they are grammatical.



Show image 8B-1: A can and a box

1. What do you see in this picture? (a box and a can)
2. There are some special words we use to talk about where things are. The word *in* is a word we use to talk about where things are.
3. [Point to image 1.] The can is *in* the box. The word *in* is a word we use to talk about where things are. When something is *in* an object or place, it means that it is inside it.
4. Which word did we use to talk about where the can is in this picture? (in)
5. [Point to image 2.] The can is *out* of the box. The word *out* is a word we use to talk about where things are. When something is *out* of an object or place, it means that it is outside—or not in—it.
6. Which word did we use to talk about where the can is in this picture? (out)

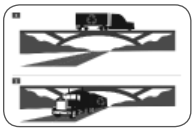


Show image 8B-2: A cat and a basket

1. What do you see in this picture? (a cat and a basket)
2. [Point to image 1.] Where is the cat in this picture? [Allow students to respond and then restate student responses for proper sentence structure.] (The cat is in the basket.)
3. Which word did we use to talk about where the cat is? (in)
4. [Point to image 2.] Where is the cat in this picture? [Allow students to respond and then restate student responses for proper sentence structure.] (The cat is out of the basket.)
5. Which word did we use to talk about where the cat is? (out)
6. Now, find two things in the classroom. Turn to your neighbor to describe where these things are using the words *in* and *out*. [Encourage students to physically use objects and movement to show examples.]

Show image 8B-3: A tree and a bird

1. What do you see in this picture? (a tree and a bird)
2. There are some special words we use to talk about where things are. The word *under* is a word we use to talk about where things are.
3. [Point to image 1.] The bird is *under* the tree. The word *under* is a word we use to talk about where things are. When something is *under* an object, it means that it is beneath, or lower than, the object.
4. Which word did we use to talk about where the bird is in this picture? (under)
5. [Point to image 2.] The bird is *over* the tree. The word *over* is a word we use to talk about where things are. When something is *over* an object or place, it means that it is above, or higher than, the object.
6. Which word did we use to talk about where the bird is in this picture? (over)



Show image 8B-4: A truck and a bridge

1. What do you see in this picture? (a truck and a bridge)
2. [Point to image 1.] Where is the truck in this picture? [Allow students to respond and then restate student responses for proper sentence structure.] (The truck is over the bridge.)
3. Which word did we use to talk about where the truck is? (over)
4. [Point to image 2.] Where is the truck in this picture? [Allow students to respond and then restate student responses for proper sentence structure.] (The truck is under the bridge.)
5. Which word did we use to talk about where the truck is? (under)
6. Now, find two things in the classroom. Turn to your neighbor to describe where these things are using *over* and *under*. [Encourage students to physically use objects and movement to show examples.]

Willy the Water Drop

9

☑ *Lesson Objectives*

Core Content Objectives

Students will:

- ✓ Explain that people have a special responsibility to conserve water
- ✓ Explain how animals, plants, and people need clean water to survive
- ✓ Identify wastewater as a source of water pollution
- ✓ Describe the steps in the water cycle
- ✓ Explain ways to conserve water

Language Arts Objectives

The following language arts objectives are addressed in this lesson. Objectives aligning with the Common Core State Standards are noted with the corresponding standard in parentheses. Refer to the Alignment Chart for additional standards addressed in all lessons in this domain.

Students will:

- ✓ With prompting and support, describe the role of an author and illustrator in a nonfiction/informational text (RI.K.6)
- ✓ Orally compare and contrast fresh water, salt water, and wastewater (RI.K.9)
- ✓ While listening to "Willy the Water Drop," orally predict what comes out of the wastewater pipe, based on text heard thus far, and then compare the actual outcome to the prediction
- ✓ Explain that "Willy the Water Drop" is realistic text because water drops really go on a journey, but it is fantasy because they don't really have feelings or talk
- ✓ Evaluate and select read-alouds or poems on the basis of personal choice for rereading

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

At a Glance	Exercise	Materials	Minutes
Introducing the Read-Aloud	**Essential Background Information or Terms**		10
	Purpose for Listening		
Presenting the Read-Aloud	**Willy the Water Drop**	Earth Hat	10
Discussing the Read-Aloud	**Comprehension Questions**		10
	Word Work: Supply		5
	Complete Remainder of the Lesson Later in the Day		
Extensions	**Domain-Related Trade Book**	trade book	15
	Student Choice		

Willy the Water Drop

9A

Introducing the Read-Aloud

***10** minutes*

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; Willy is a make-believe character; he cannot actually feel things. But his travels are similar to those that real water drops take. As Willy travels from place to place, he turns into different types of water. Explain that the three basic forms of water are fresh water, salt water, and wastewater.

Show image 9A-1: Three-pane image of fresh, salt, and waste water

Tell students that fresh water is clean water that you can drink. Salt water is salty water from the ocean or sea. We cannot drink salt water. 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. Drinking wastewater can cause animals and humans to become very sick.

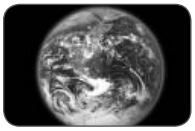
Explain that the presence of toxic wastewater is one reason why we need water treatment plants. A water treatment plant is a place that cleans dirty water. Tell students that they will hear about Willy's journey to different places, including a water treatment plant, where Willy will be cleaned and made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

Purpose for Listening

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

Note: Remember to put on your Earth Hat to present the read-aloud, and remind students that in the read-aloud, Earth will be pretending to "talk" to them.

Presenting the Read-Aloud — **10** *minutes*



Willy the Water Drop

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.[1] 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.

1 Remember, there is more water than land on the surface of the earth.

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.[2]

2 A drop is a small, rounded amount of water. *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 fresh water like Willy. Fresh water 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![3]

3 *One percent* means that for every one hundred drops of water, only one drop is fresh water.

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.[4]

4 Willy used to be fresh water, 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.[5] 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.

5 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.

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[6]

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 fresh water **supply.**[7]

6 What do you think is coming out of this pipe?

7 *Supply* means the amount of something available for use. The fresh water supply is the amount of fresh water 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 fresh water 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 fresh water 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 [8]

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.

8 Where is Willy going now?

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!

Discussing the Read-Aloud **15** *minutes*

Comprehension Questions **10** *minutes*

1. *Literal* Which important natural resource did Good Old Earth tell you about in this read-aloud? (water)

Show image 9A-1: Three-pane image of fresh, salt, and waste water

2. *Inferential* What is the difference between fresh water, salt water, and wastewater? (You can drink fresh water; salt water is salty; wastewater is dirty and could make you sick if you drink it.)
3. *Inferential* Where does wastewater come from? (factories and people's homes)
4. *Literal* Why are water treatment plants important? (They turn dirty water into clean water so we can use it again.)
5. *Inferential* Why is it important to have clean water drops like Willy? (We need clean water to drink, take baths in, and wash our clothes.)
6. *Literal* What are clouds made of? (water droplets)

[Please continue to model the *Think Pair Share* process for students, as necessary, and scaffold students in their use of the process.]

I am going to ask a question. I will give you a minute to think about the question. Then I will ask you to turn to your neighbor and discuss the question. Finally, I will call on several of you to share what you discussed with your partner.

7. *Evaluative* *Think Pair Share:* Do you think what happens in this read-aloud could really happen? Or is it pretend, or fantasy? (It is pretend because water drops do not have feelings and names; however, the journey that a water drop can take is real.)
8. After hearing today's read-aloud and questions and answers, do you have any remaining questions? [If time permits, you may wish to allow for individual, group, or class research of the text and/or other resources to answer these questions.]

Word Work: Supply *5 minutes*

1. In the read-aloud you heard, "This pipe, and many others like it, can pollute the fresh water *supply.*"
2. Say the word *supply* with me.
3. *Supply* means the amount of something that is available to use.
4. Before the storm, we got a supply of food and water 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?

Use a *Making Choices* activity for follow-up. Directions: 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."

1. Everyone brings in a box of tissues at the beginning of the school year. (That is a supply.)
2. My dad got me a big box of pencils to last me the whole school year. (That is a supply.)
3. We bring in our own snacks each day. (That is not a supply.)
4. We had hamburgers for dinner last night. (That is not a supply.)
5. 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.

Complete Remainder of the Lesson Later in the Day

Willy the Water Drop

9B

Extensions

***15** minutes*

Domain-Related Trade Book

Refer to the list of recommended trade books in the Introduction at the front of this Anthology, and choose a water-themed book to read aloud to the class, such as *Why Should I Save Water?,* by Jen Green and Mike Gordon.

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 the title page. As you read, use the same strategies that you have been using when reading the read-aloud selections in this Anthology—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 water information relates to what you have learned about taking care of the earth in this domain. If you read *Why Should I Save Water?,* tell students, "Water is very important in our everyday lives. What are some ways in which you can conserve water at home?"

Student Choice

Ask students which read-aloud they have heard recently that they would like to hear again. If necessary, reread the titles: "Introducing the Earth," "Garbage," "Natural Resources," "Reduce, Reuse, Recycle," "Recycle! Recycle! Recycle!," "Composting," "Pollution," or "Air Pollution." Show key illustrations from previous read-alouds to help students make their choice. You may also want to choose one yourself.

Reread the text that is selected. Feel free to pause at different places in the read-aloud this time and talk about vocabulary and information that you did not discuss previously during the read-aloud. After the read-aloud, ask students if they noticed anything new or different during the second reading that they did not notice during the first reading. Also, ask them to try to express why they like this read-aloud. Remember to repeat and expand upon each response using richer and more complex language, including, if possible, any read-aloud vocabulary.

Goodbye from Good Old Earth

10

☑ *Lesson Objectives*

Core Content Objectives

Students will:

- ✓ Identify possible solutions for the problems of garbage, litter, pollution, and conserving natural resources
- ✓ Explain why people have a special responsibility to take care of the earth

Language Arts Objectives

The following language arts objectives are addressed in this lesson. Objectives aligning with the Common Core State Standards are noted with the corresponding standard in parentheses. Refer to the Alignment Chart for additional standards addressed in all lessons in this domain.

Students will:

- ✓ Use a combination of drawing, dictating, and writing to present information from "Goodbye from Good Old Earth," including the topic and key details (W.K.2)
- ✓ With guidance and support from adults, explore a variety of digital tools to produce and publish a class book, "Reduce, Reuse, Recycle" (W.K.6)
- ✓ Participate in shared research and writing project to create a class book, "Reduce, Reuse, Recycle" (W.K.7)
- ✓ With assistance, update facts and information in a chart about what they learned about taking care of the earth and use it to answer questions (W.K.8)

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.
Variation(s): carpools, carpooled, carpooling

effort, *n.* A serious attempt; a try
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

At a Glance	Exercise	Materials	Minutes
Introducing the Read-Aloud	**What Have We Already Learned?**	KWL chart	10
	Purpose for Listening		
Presenting the Read-Aloud	**Goodbye from Good Old Earth**	Earth Hat	10
Discussing the Read-Aloud	**Comprehension Questions**		10
	Word Work: Effort		5
	Complete Remainder of the Lesson Later in the Day		
Extensions	**Brainstorming Links**	chart paper, chalkboard, or whiteboard	15
	Class Book: Reduce, Reuse, Recycle	drawing paper, drawing tools	

Goodbye from Good Old Earth

10A

Introducing the Read-Aloud *10 minutes*

What Have We Already Learned?

Review the KWL chart that was created 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.

Especially 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.

Now tell students that they have heard two additional read-alouds since you last worked on the KWL chart. Tell them that you are going to show them a picture or two from each of those read-alouds (Lessons 8–9) 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. Show image 8A-3 (view of city with smog), and ask students to describe what they see in this picture. Ask them to

try to remember some of the things that create air pollution. Now show them image 8A-2 (lungs), and ask if they 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), and remind them that Willy started out as clean, fresh water. Show image 9A-6 (wastewater pipe) and ask students if they remember what was coming out of this pipe. What happened to Willy after traveling through this pipe? Why is polluted water harmful?

Purpose for Listening

Tell students that today's read-aloud is the last read-aloud about taking care of the earth. Ask them to listen carefully as Good Old Earth gives them some last suggestions about how they can help to take care of their planet. Tell them to try to remember the different things that Earth says they can do to help solve the earth's problems.

Note: Remember to put on your Earth Hat to present the read-aloud, and remind students that in the read-aloud, Earth will be pretending to "talk" to them.

Presenting the Read-Aloud — **10** *minutes*

Goodbye from Good Old Earth

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 goodbye, 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 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.[1] 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.

1 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.

2 What symbol do you see on this bin?

Show image 10A-2: Recycling bin[2]

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.

3 Tell me what you see in this picture. Can you think of why riding a bike might be better for the earth than driving a car?

Show image 10A-3: Family riding bikes [3]

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 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.

4 What is this a picture of? How many people could ride in it at one time?

Show image 10A-4: Bus [4]

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 fresh water to survive, and that there is a limited supply of fresh water 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**[5] to help reduce, reuse, and recycle, it adds up and makes a *big* difference in taking care of good old Earth. Thank you!

5 or seriously tries

Discussing the Read-Aloud *15 minutes*

Comprehension Questions *10 minutes*

1. *Literal* Name some things you and your family can do to help solve the trash problem. (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. (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. *Inferential* How does planting a tree clean the air? (Trees and plants take in the dirty air and give off oxygen. So, if you plant a tree, you will be helping to clean the air.)
4. *Inferential* How does turning off the lights reduce pollution? (The electricity to light up a room comes from a power plant. The less electricity you use, the less a coal-fired power plant pollutes the air or water.)
5. *Literal* Name one way you can conserve fresh water. (Only use the amount of fresh water you need. You can conserve water by turning off the water when brushing your teeth, taking shorter showers, etc.)

[Please continue to model the *Think Pair Share* process for students, as necessary, and scaffold students in their use of the process.]

I am going to ask a question. I will give you a minute to think about the question. Then I will ask you to turn to your neighbor and discuss the question. Finally, I will call on several of you to share what you discussed with your partner.

6. *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.)
7. After hearing today's read-aloud and questions and answers, do you have any remaining questions? [If time permits, you may wish to allow for individual, group, or class research of the text and/or other resources to answer these questions.]

Word Work: Effort

5 *minutes*

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 serious attempt or a try at something.
4. If people make an effort to reduce air pollution, we will conserve more of our natural resources.
5. Tell me about some way 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. Directions: 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."

1. dropping my apple core on the playground after I eat it (That is not an effort to take care of the earth.)
2. throwing my plastic water bottle into the correct recycling bin (That is an effort to take care of the earth.)

3. composting my leftover food scraps in the compost bin (That is an effort to take care of the earth.)
4. turning off the lights when I leave the room (That is an effort to take care of the earth.)
5. letting the water faucet run while I brush my teeth (That is not an effort to take care of the earth.)

Complete Remainder of the Lesson Later in the Day

Goodbye from Good Old Earth

10B

Extensions

***15** minutes*

Brainstorming Links

Materials: Chart paper, chalkboard, or whiteboard

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 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. Now 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. Ask them to share their ideas; record all of the ideas on chart paper, a chalkboard, or a whiteboard. 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 recyle?"

Next, say the word *pollution.* Ask students what problems come to mind when they think about land, water, and air pollution. Now 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. Ask them to share their ideas; record all of the ideas on chart paper, a chalkboard, or a whiteboard.

Discuss these possible solutions, and then choose one or more, if possible, to actually put into action.

Class Book: Reduce, Reuse, Recycle

Materials: Drawing paper, drawing tools

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. (You may want to refer to the brainstorming activity above for ideas of problems and solutions.) Have each student choose one idea to draw a picture of, and ask him or her to write a caption for the picture.

Look into an electronic publishing program (such as iMovie, or iPublish) or create a slide presentation (such as PowerPoint), or bind the pages to make a book to put in the class library for students to read again and again.

Domain Review

DR

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:

- ✓ Recognize that people share the responsibility to take care of the earth
- ✓ Explain that Earth is composed of land, water, and air
- ✓ Recognize that humans, plants, and animals depend on Earth's natural resources to live
- ✓ Identify key natural resources
- ✓ Describe how people use natural resources
- ✓ Recognize the need to conserve natural resources
- ✓ Recognize the phrase "Reduce, reuse, recycle," and recall what these words mean
- ✓ Describe how applying "Reduce, reuse, recycle" helps to conserve natural resources
- ✓ Identify common recyclable materials, including glass, plastic, aluminum, cardboard, and paper
- ✓ Explain that recycled materials are made from recyclable items that otherwise would have been garbage
- ✓ Explain different types of pollution, including land pollution, air pollution, and water pollution
- ✓ Recognize that pollution harms Earth and the things that live on Earth

- ✓ Sequence what happens to garbage from its creation to being dumped in the landfill
- ✓ Identify cars and factories as two main contributing factors to air pollution
- ✓ Identify three types of water: fresh water, wastewater, and salt water
- ✓ Recall that animals, plants, and people need clean water to survive
- ✓ Identify possible solutions for the problems created by pollution

Activities

Recycling

Materials: Instructional Master DR-1

Make this Instructional Master into an overhead, and use it to review the steps in the recycling process with the class. Cover all the images except the top one and ask what happens next. Then uncover the next image and ask what happens next. Do this until all the images have been uncovered.

Helping the Earth

Materials: Instructional Master DR-2

Review ways students can help take care of the earth and ways students might harm the earth. Have students draw a circle around actions that help to care for the earth and put an X through the action that harms the earth.

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?"

Riddles for Core Content

Ask the students riddles such as the following to review core content: [Whenever possible, have students hold up their Response Cards to respond.]

- We are three types of pollution that affect planet Earth. What are we? (land, water, air)
- 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? (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? (fresh water, 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

Read an additional trade book to review a particular concept; refer to the books listed in the domain introduction. You may also choose a specific read-aloud for students to hear again.

Domain Assessment

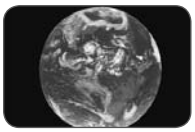
DA

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 (Instructional Master DA-1)

Directions: I am going to say a sentence using a word you have heard in the read-alouds and the domain. If I use the word correctly in my sentence, circle the smiling face. If I do not use the word correctly in my sentence, circle the frowning face. I will say each sentence two times. Let's do number one together.



Show image 1A-1: Earth from outer space

1. **Earth:** This is a picture of Earth. (smiling face)
2. **Conserve:** Using a lot of paper helps to converse trees. (frowning face)
3. **Exhaust:** Exhaust from cars makes the air clean and smell good. (frowning face)

Show image 2A-8: Landfill

4. **Landfill:** This is where a lot of our trash goes after we throw it away; it is a landfill. (smiling face)
5. **Natural Resources:** Trees, fresh water, and coal are examples of Earth's natural resources. (smiling face)

Show image 7A-7

6. **Smog:** This is an example of smog. (smiling face)
7. **Pollution:** Water pollution is healthy for fish. (frowning face)
8. **Litter:** Litter is trash that is thrown on the ground instead of into a trash can. (smiling face)
9. **Appliance:** A pencil is an example of an electrical applicance. (frowning face)
10. **Recycle:** Bottles and cans are examples of items we can recycle. (smiling face)

Directions: Now I am going to read more sentences using other words you have heard. If I use the word correctly in my sentence, circle the smiling face. If I do not use the word correctly in my sentence, circle the frowning face. I will say each sentence two times.

11. **Effort:** When people make an effort to do something, it means they try hard. (smiling face)
12. **Reduce:** To reduce means to use less of something. (smiling face)

Show image 4A-6

13. **Symbol:** These are recycling symbols. (smiling face)
14. **Hazardous:** Breathing in too much air pollution is hazardous to our health. (smiling face)
15. **Appreciate:** If you appreciate something, you will want to throw it away. (frowning face)

Part II (Instructional Master 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 the smiling face. If the action is not an example of taking care the earth, circle the frowning face.

1. Nadia organizes a litter pick-up at a nearby park. (smiling face)
2. Rob turns off all the lights in his home before leaving. (smiling face)
3. Leila lets the water run for a long time while she washes her hands. (frowning face)
4. Jeannette throws her paper bag on the ground after she finishes her lunch. (frowning face)
5. Cate draws on both sides of a clean piece of paper before recycling it. (smiling face)
6. Jin's dad rides his bike to work every day instead of driving his car. (smiling face)
7. The Acevedo family carpools with their neighbor to take their kids to school. (smiling face)
8. Rodney uses six paper towels to dry off his hands. (frowning face)

Culminating Activities

CA

Note to Teacher

Please use this final day to address class results of the Domain Assessment. Based on the results of the Domain Assessment and students' Tens scores, 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 area of weakness, as indicated from Domain Assessment results and students' Tens scores.

Remediation opportunities include:

- targeting Review Activities
- revisiting lesson Extensions
- rereading and discussing select read-alouds

Enrichment

Domain-Related Trade Book

Materials: Trade book

Read an additional trade book to review a particular concept; refer to the books listed in the domain introduction.

Exploring Student Resources

Materials: Domain-related student websites

Pick appropriate websites from the Internet or from the websites listed in the domain introduction for further exploration of topics covered in this domain: natural resources, pollution, and reduce, reuse, recycle.

Domain-Related Videos

Materials: Short child-friendly videos about taking care of the earth

Carefully peruse the Internet for short (5 minutes or less) videos related to topics covered in this domain.

Prepare some questions related to the videos.

Discuss how watching a video is the same as and different from listening to a read-aloud or storybook.

Have students ask and answer questions using question words *who, where,* and *what* regarding what they see in the videos.

Take Action

Materials: Drawing paper, drawing tools

Students have now learned about many different ways to take care of the earth: recycling, reducing air pollution, etc. Tell the class or small groups that they are going to make a big 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. (Note: You may want to tie this to an event, such as Earth Day, National Walk to School Day, Arbor Day, etc.)

Air Quality Color Check

Tell the class that they can 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.

Reuse Art Fair

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

If you have not begun this long term project, you can begin it at this point. (See suggestions in the Pausing Point.)

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).

Class Job Report

If you have assigned class jobs, have the individual or small group report back to the class about their job and how it helps to keep Earth clean and green.

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.

For Teacher Reference Only:

Copies of *Tell It Again! Workbook*

1B-1

Dear Family Member,

Over the next couple of weeks, your child will be learning about how to take care of the earth. Each day s/he will be listening to a read-aloud that shows the beauty of Earth and explains why we all have a responsibility to keep Earth beautiful and clean. S/he will also learn about the three words *reduce, reuse, recycle,* and different ways that s/he can help keep Earth a safe place to live.

Below are some suggestions for activities that you may do at home to reinforce what your child is learning about taking care of the earth.

1. Use the Word *Responsibility*

Your child has learned and will be using the word *responsibility* to talk about actions we should all take to keep Earth clean. Ask your child, "What responsibility do you have in keeping the earth a beautiful place to live?" Encourage your child to use this word in situations other than ones in which you talk about taking care of the earth. Ask, "What are some responsibilities you have at home? What are some responsibilities you have at school? How are they different from your teacher's responsibilities?"

2. How to Clean Up Earth

Give your child prompts, such as "What should I do if I have an empty soda can? Should I throw it away in the trash can? What about old newspapers? What should I do with them? How can I reduce, reuse, and recycle these items?" Using these prompts, have your child give instructions on how to reduce, reuse, and recycle.

3. Draw Nature and Its Resources

Have your child draw a nature scene, such as a forest, an ocean, or the sky filled with birds. Ask your child, "What natural resource is in your nature drawing?" Then ask your child what would happen if that natural resource was used up or polluted. Ask, "What would happen to the scene you drew?" Discuss with your child why it is important to conserve natural resources, such as trees, clean water, and clear skies.

4. Read Aloud Each Day

It is very important that you read to your child each day. The local library has many books about taking care of the earth, including books about conserving natural resources and recycling. A list of books and other resources relevant to this topic is attached to this letter.

Be sure to let your child know how much you enjoy hearing about what s/he has learned at school.

Recommended Resources for Taking Care of the Earth

Trade Book List

1. *And Still the Turtle Watched,* by Sheila MacGill-Callahan and illustrated by Barry Moser (Puffin, 1996) ISBN 978-0140558364
2. *Arthur Turns Green,* by Marc Brown (Little, Brown Books for Young Readers, 2011) ISBN 978-0316129244
3. *Blow! Air,* by Núria Jiménez and Empar Jiménez and illustrated by Rosa M. Curto (Barron's Educational Series, 2010) ISBN 978-0764145452
4. *Click! Energy,* by Núria Jiménez and Empar Jiménez and illustrated by Rosa M. Curto (Barron's Educational Series, 2010) ISBN 978-0764145476
5. *Compost Stew: An A to Z Recipe for the Earth,* by Mary McKenna Siddals and illustrated by Ashley Wolff (Tricycle Press, 2010) ISBN 978-1582463162
6. *EcoArt! Earth-Friendly Art & Craft Experiences for 3– to 9–Year Olds,* by Laurie Carlson (Williamson Pub, 1992) ISBN 978-0913589687
7. *Garbage and Recycling (Young Discoverers: Environmental Facts and Experiments),* by Rosie Harlow and Sally Morgan (Kingfisher, 2002) ISBN 978-0753455036
8. *The Green Mother Goose: Saving the World One Rhyme at a Time,* by Jan Peck and David Davis and illustrated by Carin Berger (Sterling, 2011) ISBN 978-1402765254
9. *I Am Water (Hello Reader! Level 1 Science),* by Jean Marzollo and illustrated by Judith Moffatt (Cartwheel, 1996) ISBN 978-0590265874
10. *It's Earth Day! (Little Critter),* by Mercer Mayer (HarperFestival, 2008) ISBN 978-0060539597

11. *Just a Dream,* by Chris Van Allsburg (Houghton Mifflin, 1990) ISBN 978-0395533086
12. *The Lorax,* by Dr. Seuss (Random House Books for Young Readers, 1971) ISBN 978-0394823379
13. *Michael Recycle,* by Ellie Bethel and illustrated by Alexandra Colombo (Idea & Design Works, 2008) ISBN 978-1600102240
14. *Rachel: The Story of Rachel Carson,* by Amy Ehrlich and illustrated by Wendell Minor (Voyager Books, 2008) ISBN 978-0152063245
15. *Recycle!: A Handbook for Kids,* by Gail Gibbons (Little, Brown Young Readers, 1996) ISBN 978-0316309431
16. *A River Ran Wild,* by Lynne Cherry (Voyager Books, 2002) ISBN 978-0152163723
17. *The Three Rs: Reduce, Reuse, Recycle (What Do You Know About?),* by Núria Roca and illustrated by Rosa M. Curto (Barron's Educational Series, 2007) ISBN 978-0764135811
18. "Sarah Sylvia Cynthia Stout Would Not Take the Garbage Out," from *Where the Sidewalk Ends,* by Shel Silverstein (HarperCollins Children's Books, 2004) ISBN 978-0060572341
19. *Splash! Water, by* Núria Jiménez and Empar Jiménez and illustrated by Rosa M. Curto (Barron's Educational Series, 2010) ISBN 978-0764145445
20. *Stories for a Fragile Planet: Traditional Tales About Caring for the Earth,* by Kenneth Steven and Jane Ray (Lion UK, 2013) ISBN 978-0745963860
21. *The Wartville Wizard,* by Don Madden (Aladdin, 1993) ISBN 978-0689716676
22. *Where Do Recyclable Materials Go? Read, Think, Recycle,* by Sabbithry Persad (Firewater Media Group, 2011) ISBN 978-0981243900
23. *Where Does the Garbage Go?,* by Paul Showers and illustrated by Randy Chewning (Harper Trophy, 1994) ISBN 978-0064451147

24. *Why Should I Save Water? (Why Should I?),* by Jen Green and illustrated by Mike Gordon (Barron's Educational Series, 2005) ISBN 978-0764131578
25. *The Wump World,* by Bill Peet (Sandpiper, 1981) ISBN 978-0395311295
26. *Yuck! Waste,* by Núria Jiménez and Empar Jiménez and illustrated by Rosa M. Curto (Barron's Educational Series, 2010) ISBN 978-0764145469

Websites and Other Resources

Student Resources

1. Groovy Garden Game
   http://to.pbs.org/VyADoG
2. U.S. National Park Pictures
   http://bit.ly/Ugne4D
3. Connect the Dots
   http://bit.ly/SVjwJ8
4. Ocean Pictures
   http://bit.ly/U6J4kR
5. Children of the Earth United
   http://childrenoftheearth.org

Family Resources

6. The Green Guide for Kids: Reduce, Reuse, Recycle
   http://bit.ly/TuEpuB
7. Landfills
   http://bit.ly/TuExdO
8. Walk to School
   walktoschool.org
9. School Recycling Program
   http://dsorg.us/ViqlDO

3B-1

Name _____

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.				

3B-1

Name _____ **Answer Key**

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. 



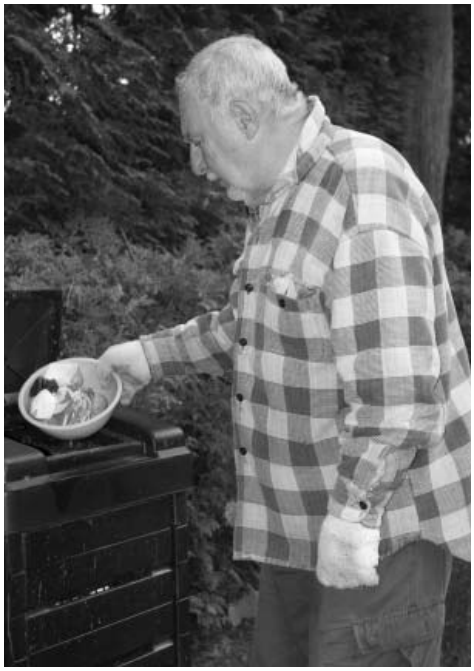
6. 



6B-1

Name _____

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.

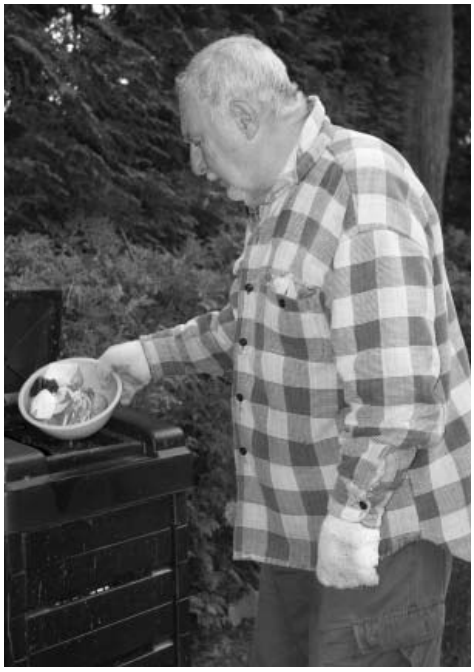


6B-1

Name _____ **Answer Key**

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

6B-2

Dear Family Member,

Your child is continuing to learn about taking care of the earth this week. S/he has learned more about recycling and about different types of pollution in the environment. Today, s/he learned about a way to recycle food called *composting.*

Below are some suggestions for activities that you may do at home to reinforce what your child is learning about taking care of the earth.

1. Use the Word *Solution*

Your child has learned and has been using the word *solution* to talk about addressing the problems of pollution and waste. Ask your child, "Can you name a few solutions you learned about that help keep Earth clean?" Encourage your child to use this word in situations other than ones in which you talk about taking care of the earth. Ask, "What is the solution to the math problem two plus one? What is the solution to a dirty room?"

2. Recycle! Recycle! Recycle!

At home, have your child help sort the recyclable items into plastics, paper, glass, and metals. Keep these items in separate bins. If possible, take your child to a recycling center, and point to the appropriate bins as you place the recyclable items into them. As you do this, say, "Recycling helps to reduce trash in landfills. It helps to create a cleaner world."

3. Sayings and Phrases: A Place for Everything, and Everything in Its Place

Your child has learned the saying "a place for everything, and everything in its place." Talk with your child about its meaning. Use this saying at home or out in public to demonstrate how garbage has its proper place in a trash can, recycle bin, or compost pile.

4. Read Aloud Each Day

It is very important that you read to your child each day. Please refer to the list of books and other resources sent home with the previous family letter, recommending resources related to taking care of the earth.

5. Saving Water

When your child brushes his/her teeth or takes a bath or shower, remind him/her that s/he needs to remember to conserve water. Say, "We need to conserve water, so that there is enough fresh water for everyone to use."

6. Saving Electricity

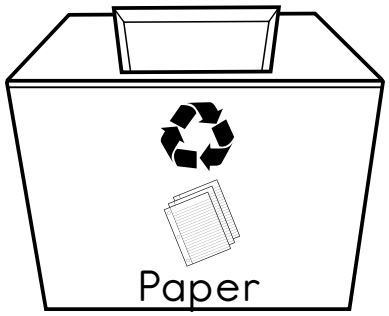
When your child is the last one to leave a room, remind him/her to turn off the lights to help conserve electricity. Say, “We need to conserve electricity, so that we can help take care of the earth.”

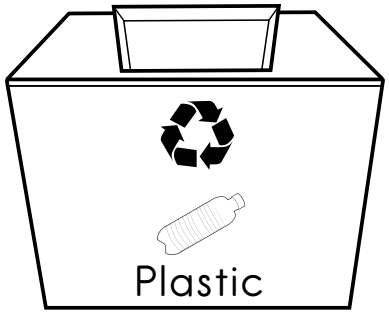
Be sure to let your child know how much you enjoy hearing about what s/he has learned at school.

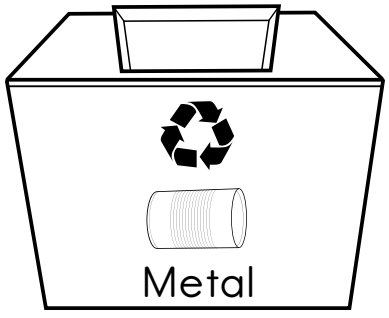
PP-1

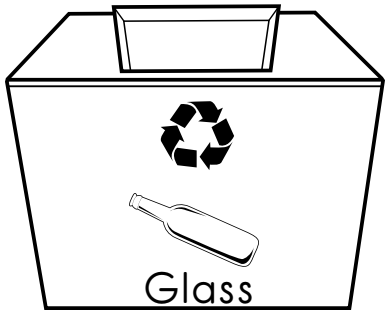
Name _____

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.





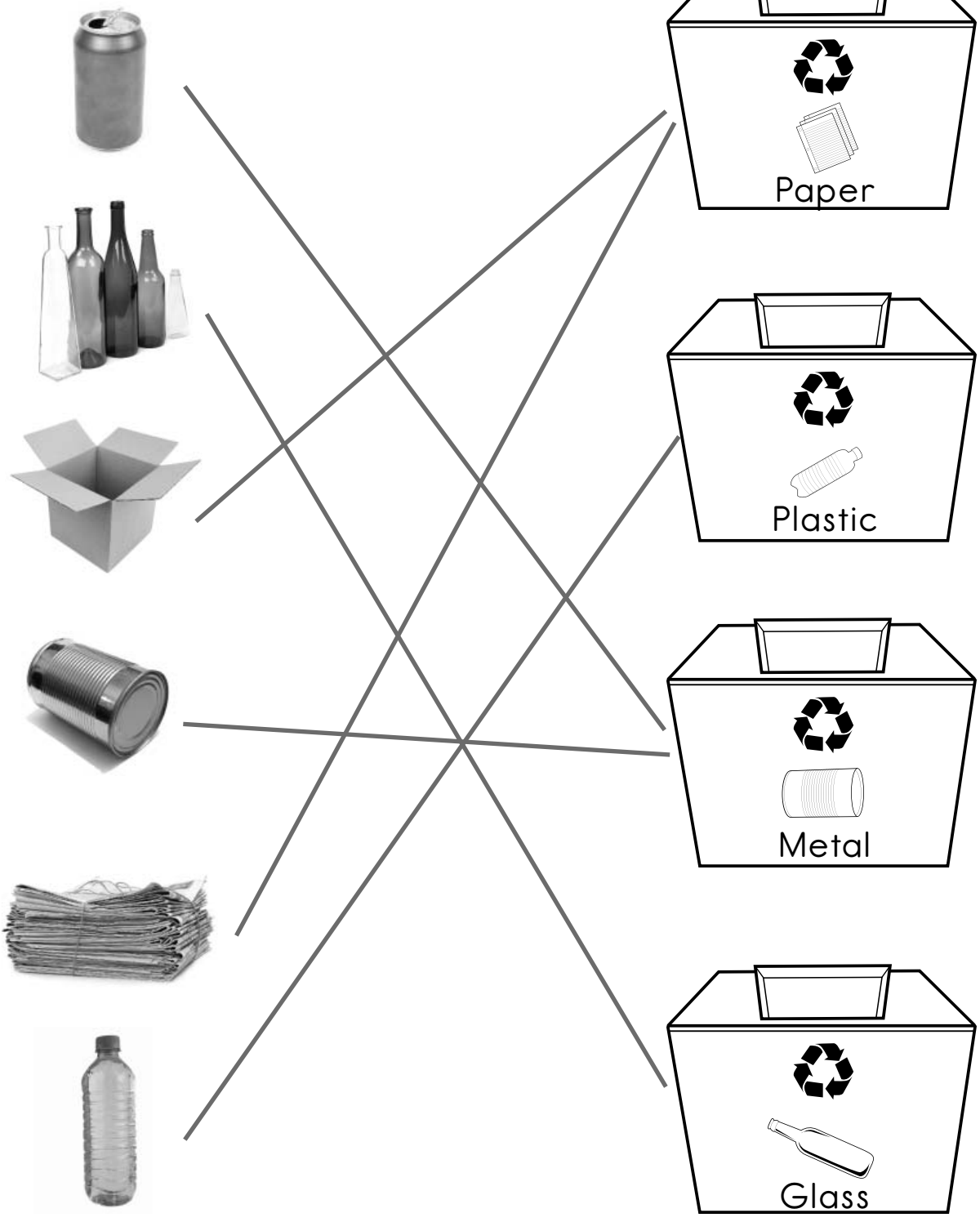




PP-1

Name _____ **Answer Key**

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.



DA-1

Name _____

Directions: Listen carefully to the words and sentences read by your teacher. If the sentence uses the word correctly, circle the smiling face. If the sentence uses the word incorrectly, circle the frowning face.

1.  
2.  
3.  
4.  
5.  
6.  
7.  
8.  
9.  
10.  

11.  

12.  

13.  

14.  

15.  

DA-1

Name _____ **Answer Key**

Directions: Listen carefully to the words and sentences read by your teacher. If the sentence uses the word correctly, circle the smiling face. If the sentence uses the word incorrectly, circle the frowning face.

1.  
2.  
3.  
4.  
5.  
6.  
7.  
8.  
9.  
10.  

11.  

12.  

13.  

14.  

15.  

DA-2

Name _____

Directions: Your teacher will read a sentence about an action someone does that affects the earth. First, you will listen to the sentence. 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 the smiling face. If the action is not an example of taking care of the earth, circle the frowning face.]

1.
2.
3.
4.
5.
6.
7.
8.

DA-2

Name _____ **Answer Key**

Directions: Your teacher will read a sentence about an action someone does that affects the earth. First, you will listen to the sentence. 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 the smiling face. If the action is not an example of taking care of the earth, circle the frowning face.]

1.  
2.  
3.  
4.  
5.  
6.  
7.  
8.  

Tens Recording Chart

Use this grid to record Tens scores. Refer to the Tens Conversion Chart that follows.

Name							

Tens Conversion Chart

Number Correct

Number of Questions	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	0	10																			
2	0	5	10																		
3	0	3	7	10																	
4	0	3	5	8	10																
5	0	2	4	6	8	10															
6	0	2	3	5	7	8	10														
7	0	1	3	4	6	7	9	10													
8	0	1	3	4	5	6	8	9	10												
9	0	1	2	3	4	6	7	8	9	10											
10	0	1	2	3	4	5	6	7	8	9	10										
11	0	1	2	3	4	5	5	6	7	8	9	10									
12	0	1	2	3	3	4	5	6	7	8	8	9	10								
13	0	1	2	2	3	4	5	5	6	7	8	8	9	10							
14	0	1	1	2	3	4	4	5	6	6	7	8	9	9	10						
15	0	1	1	2	3	3	4	5	5	6	7	7	8	9	9	10					
16	0	1	1	2	3	3	4	4	5	6	6	7	8	8	9	9	10				
17	0	1	1	2	2	3	4	4	5	6	6	7	7	8	8	9	9	10			
18	0	1	1	2	2	3	3	4	4	5	6	6	7	7	8	8	9	9	10		
19	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	
20	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10

Simply find the number of correct answers the student produced along the top of the chart and the number of total questions on the worksheet or activity along the left side. Then find the cell where the column and the row converge. This indicates the Tens score. By using the Tens Conversion Chart, you can easily convert any raw score, from 0 to 20, into a Tens score.

Please note that the Tens Conversion Chart was created to be used with assessments that have a defined number of items (such as written assessments). However, teachers are encouraged to use the Tens system to record informal observations as well. Observational Tens scores are based on your observations during class. It is suggested that you use the following basic rubric for recording observational Tens scores.

9–10	Student appears to have excellent understanding
7–8	Student appears to have good understanding
5–6	Student appears to have basic understanding
3–4	Student appears to be having difficulty understanding
1–2	Student appears to be having great difficulty understanding
0	Student appears to have no understanding/does not participate

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