



Unit Essential Question

How can we obtain, evaluate and communicate the effects of pollution on the environment?

UNIT DESCRIPTION

Students will use theatre, music, movement, and the visual arts to observe, obtain, evaluate and communicate the effects of pollution on the environment. This unit uses *The Lorax* by Dr. Seuss to bring to life the causes and effects of various types of pollution on the environment and their ecosystems. Students will also strengthen their persuasive and descriptive writing skills throughout the projects in this “Pollution Matters” unit

PROJECTS

- Project 1: Ego vs Eco
- Project 2: Good Garbage
- Project 3: The Lorax

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Units provide differentiated ideas and activities aligned to a sampling of standards. The units do not necessarily imply mastery of standards, but are intended to inspire and equip educators.

Produced through the U.S. Department of Education: Arts in Education—Model Development and Dissemination Grants Program
Cherokee County (GA) School District and ArtsNow, Inc.

UNIT OVERVIEW

Unit Description	Table of Contents
<p>Students will use theatre, music, movement, and the visual arts to observe, obtain, evaluate and communicate the effects of pollution on the environment. This unit uses <i>The Lorax</i> by Dr. Seuss to bring to life the causes and effects of various types of pollution on the environment and their ecosystems. Students will also strengthen their persuasive and descriptive writing skills throughout the projects in this “Pollution Matters” unit.</p>	<ul style="list-style-type: none"> • Project 1: Ego vs Eco • Project 2: Good Garbage • Project 3: The Lorax

UNIT ESSENTIAL QUESTION

How can we obtain, evaluate and communicate the effects of pollution on the environment?

CROSS-CUTTING INTERDISCIPLINARY CONCEPT

Cause/Effect
Compare/Contrast

REAL WORLD CONTEXT

We study the effects of pollution on the environment because it is in the world around us and affects our lives on a daily basis. Understanding the impact of pollution on our environment will help us make better decisions about our everyday choices as producers and consumers.

PROJECT ESSENTIAL QUESTIONS

PROJECT 1: How does pollution affect people from different cultures in different ways?

PROJECT 2: How can I use music to evaluate and communicate information about the effects of pollution on people and the environment?

PROJECT 3: How can art be used to compare and contrast the land of the Lorax before and after the Onceler? How do you analyze the mood in a piece of artwork using key vocabulary?

STANDARDS

Curriculum Standards

Arts Standards

<p>S3L2. Obtain, evaluate and communicate information about the effects of pollution (air, land, and water) and humans on the environment.</p> <p>ELAGSE3W1: Write opinion pieces on topics or texts, supporting a point of view with reasons.</p> <p>a. Introduce the topic or book they are writing about, state an opinion, and create an organizational structure that lists reasons. b. Provide reasons that support the opinion.</p> <p>c. Use linking words and phrases (e.g., because, therefore, since, for example) to connect opinion and reasons.</p> <p>d. Provide a concluding statement or section</p> <p>ELAGSE3RI3: Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.</p> <p>ELAGSE3RI6: Distinguish their own point of view from that of the author of a text</p> <p>ELAGSE3RL5: Refer to parts of stories, dramas, and poems when writing or speaking about a text using terms such as chapter, scene, and stanza; describe how each successive part builds on earlier sections.</p>	<p>VA3AR.1: Discuss his or her artwork and the artwork of others.</p> <p>VASAR.2: Uses a variety of approaches to understand and critique works of art.</p> <p>D3CR.1: Demonstrates an understanding of creative and choreographic principles, processes and structures.</p> <p>e. Responds through movement to a variety of stimuli (eg. Literature, visual art, props)</p> <p>D3CR.2: Demonstrates an understanding of dance as a way to communicate meaning.</p> <p>a. Uses a combination of improvisations and choreographic tools to create movement based on one's own ideas, feelings, concepts and kinetics awareness</p> <p>M3GM.1: Singing, alone and with others, a varied repertoire of music.</p> <p>M3GM.5: Composing and arranging music within specified guidelines.</p> <p>a. Create rhythmic motives and enhance literature.</p> <p>b. Compose simple melodic patterns.</p> <p>c. D. Arrange rhythmic patterns creating simple forms and instrumentation.</p> <p>TAES3.2: Developing scripts through improvisation and other theatrical methods</p> <p>a. Uses the playwriting process: pre-write/pre-play; prepare to write/plan dramatization; write; dramatize; reflect and edit; re-write/play; publish/perform</p> <p>b. Collaborates to generate story ideas</p> <p>c. Describes the elements of script writing; plot, setting, point of view, sequence of events, and cause and effect</p> <p>TAES3.4: Designing and executing artistic and technical elements of theatre</p> <p>a. Uses technical theatre elements to design costumes, props, sets, sound and lighting</p> <p>b. Incorporates technical theatre elements such as costumes, props, sets, sound, lighting, into dramatizations</p> <p>VA3PR.1 Creates artworks based on personal</p>
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	<p>experience and selected themes.</p> <ul style="list-style-type: none">a. Creates artworks to express individual ideas, thoughts, and feelings from memory, imagination, and observation.b. Creates artworks emphasizing one or more elements of art (e.g., color, line, shape, form, texture).c. Creates art emphasizing one or more principles of design (balance, proportion, rhythm, emphasis, unity, contrast).d. Combines materials in new and inventive ways to make a finished work of art. <p>VA3PR.2 Understands and applies media, techniques, and processes of two-dimensional art processes (drawing, painting, printmaking, mixed-media) using tools and materials in a safe and appropriate manner to develop skills.</p> <ul style="list-style-type: none">a. Creates drawings with a variety of media (e.g., pencils, crayons, pastel).b. Draws lines with varied weights and in varied ways.c. Uses directional lines (vertical, horizontal, diagonal).d. Creates landscape with foreground, middle ground, background.e. Achieves distance through diminishing sizes and placement of objects higher on the page <p>VA3AR.1 Discusses his or her artwork and the artwork of others.</p> <ul style="list-style-type: none">a. Describes how size, colors, lines, shapes, and textures are organized in artwork to create a focus or center of interest (emphasis).b. Demonstrates a respect for art forms and art objects.c. Uses art terminology with emphasis on the elements of art: line, shape, form, color, space, texture.d. Uses art terminology with emphasis on the principles of design. (e.g., balance, proportion, rhythm, emphasis, unity, contrast).e. Recognizes that lines can be used to suggest movement, feelings, sounds, and ideas.f. Points to descriptive, directional, and expressive lines in artworks.g. Explains how texture (implied and actual) is used in two-dimensional shapes and three-dimensional
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	<p>forms.</p> <p>h. Identifies intermediate and complementary colors, tints, and shades of colors.</p> <p>i. Recognizes value as the lightness and darkness of a color.</p> <p>j. Distinguishes between 2-D shapes and 3-D forms.</p> <p>k. Recognizes the division of picture plane into foreground, middle ground, and background.</p> <p>l. Describes how negative and positive space is related.</p> <p>m. Recognizes and compares symmetrical and asymmetrical balance in artworks.</p>
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MATERIALS TO BE PURCHASED FOR UNIT

<ul style="list-style-type: none"> ● Science Weekly Newspapers ● Post It brand chart paper ● Clear Garbage bags ● Black Ultra Fine Sharpies ● Soft Chalk Pastels ● Patel Card Paper ● Light Filters or Color Transparencies ● Flash Light ● Spray Fixatives
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ASSESSMENTS

Summative Assessments
Pre/Post Test

CHARACTER EDUCATION COMPONENTS

CHARACTER ATTRIBUTES ADDRESSED DURING UNIT

<p>Students can also create and share brochures with other students, school visitors, and/or grade levels to encourage environmental awareness. Students will collaborate with peers to create a variety of projects that educate others on the awareness of pollution and what they can do to limit the amount of garbage and pollution in the ecosystems around the world.</p>	<p>Empathy</p> <p>Learning with others</p> <p>Environmental awareness</p> <p>Respect</p>
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PARTNERING WITH FINE ARTS TEACHERS



Music Teacher:

- Can provide assistance to students with creating song documenting awareness of pollution
- Help students select music to use with song lyric creation
- Review Quaver program to assist students with composing music

Visual Arts/Drama Teacher:

- Assist students with the process of text rendering when creating visual representations of art using the garbage collected
- Discuss with students the elements of art (tone, mood, warm/cool colors) when analyzing a piece of art

Physical Education Teacher:

- Teach students empathy by sharing a variety of movements that express a variety of emotions

APPENDIX

- Pretest/Posttest

ADDITIONAL RESOURCES**SUGGESTED BOOKS:**

The Lorax

WEBSITES:**VIRTUAL FIELDTRIPS:**

Name: _____ Date: _____

Pre/Post Test
Pollution

Vocabulary Box

Pollution	Biodegradable	Non-biodegradable	Littering
Exhaust	Smog	Acid rain	Ozone layer
Aerosol	Paper	Plastic	Aluminum foil

1. Which of the following is an example of air pollution?
 - a. Car exhaust
 - b. Clouds
 - c. Oil spill in the ocean
2. Which of the following is an example of land pollution?
 - a. Yard clippings
 - b. Household garbage
 - c. Food on the ground outside
3. Which of the following is NOT an example of water pollution?
 - a. Acid rain
 - b. Run off from agricultural farm land
 - c. Treated water from a sewage plant

4-7. Give an example for how to reduce, reuse and recycle for each type of pollution.

	Air Pollution	Water Pollution	Land Pollution
Reduce			
Reuse			
Recycle			

8. How are these animals impacted by pollution?
 - a. Hawk (Air pollution):
 - b. Black Bear (Land Pollution):
 - c. Sea Turtle (Water Pollution):

9. Describe the differences between biodegradable and non-biodegradable objects. Give an example of each.

10. A family went on a picnic at the lake. Explain what the family should do with their trash and left-over food.

Name _____

Date _____

BrainPop Notes: Effects of Humans on the Environment
Graphic Organizer

Directions: While watching the BrainPop video, list the Causes and Effects you noticed using the t-chart below.

Causes	Effects

Name: _____ Date: _____

Pre/Post Test
Pollution

Vocabulary Box

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Causes	Effects



Unit Essential Question

How does pollution affect people from different cultures in different ways?

PROJECT DESCRIPTION

In this project, students will learn about air, water and land pollutants from around the world. Students will express how they feel emotionally about pollution through movement. They will respond to images addressing pollution using dance. The culminating activity for students is creating an environmental awareness brochure that synthesizes all of their knowledge around pollution.

LEARNING TARGETS

“I Can...”

- I can identify types of pollution around the world
- I can analyze the effects that pollution has on human life
- I can express feeling towards pollution using movement

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Approx. Duration of Project: 2 days of 45 minutes each day

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ESSENTIAL QUESTIONS

<p>How does pollution affect people from different cultures in different ways?</p>
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STANDARDS

Curriculum Standards.	Arts Standards
<ul style="list-style-type: none"> • S3L2. Obtain, evaluate and communicate information about the effects of pollution (air, land, and water) and humans on the environment. 	<p>D3CR.1: Demonstrates an understanding of creative and choreographic principles, processes and structures. e. Responds through movement to a variety of stimuli (eg. literature, visual art, props)</p> <p>D3CR.2: Demonstrates an understanding of dance as a way to communicate meaning.</p> <ul style="list-style-type: none"> • Uses a combination of improvisations and choreographic tools to create movement based on one’s own ideas, feelings, concepts and kinetic awareness •

KEY VOCABULARY

Content Vocabulary	Arts Vocabulary

Approx. Duration of Project: 2 days of 45 minutes each day

<ul style="list-style-type: none"> • Pollution • Reduce • Recycle • Reuse • Garbage • Litter • Smog • Smoke • Water Vapor • Acid Rain • Oil Spills • Run off • Pesticides • Fertilizers • Emission (ex: car, airplane) 	<ul style="list-style-type: none"> • Mood: emotion or feeling • Locomotive Movement: movement traveling through space • Non-locomotive movement: movement standing in one place • Body Levels: the plane in which your body is moving, including high, mid and low levels • Movement Pathways: the path a dancer travels through space, such as curved or straight
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TECHNOLOGY INTEGRATION

<p>https://jr.brainpop.com/science/conservation/reducereuserecycle/</p>
<p>https://www.brainpop.com/science/ourfragileenvironment/airpollution/</p>
<p>https://www.brainpop.com/science/ourfragileenvironment/waterpollution/</p>
<p>https://www.brainpop.com/technology/scienceandindustry/wastemanagement/</p>
<p>https://www.brainpop.com/science/ourfragileenvironment/humansandtheenvironment</p>

ASSESSMENTS

Formative	Summative
<ul style="list-style-type: none"> • Brainpop quiz: Effects of humans on the environment • Graphic organizer while watching video 	<ul style="list-style-type: none"> • Project 1 Rubric (See Downloads)

Approx. Duration of Project: 2 days of 45 minutes each day

MATERIALS

- Microsoft SWAY program
- Chart paper
- Markers
- Pollution Articles (located in Main Activity Part 2 below)
- Computer/tablet for Padlet (if chosen)
- Post it Notes
- If doing extension, old t-shirts

Activating Strategy

- Students will view a slide show: <https://sway.com/IT9ZpXuLI9nUt7Gy> including images regarding pollution and discuss the images as a class.
- After each slide, students will stop to interpret a movements to show how each image makes them feel. The teacher will ask students to explain their rationale for choosing each movement.

Main Activity

PART 1

- Introduce to students the concept of “Ego vs. Eco” (human advancement at the expense of nature vs. caring for the ecosystem): Use this website resource to explore/ research <https://recyclingsustainability4a.weebly.com/ego-vs-eco.html>
- Students will create digital journal entries on Padlet/Post it notes (teacher's choice) to explain possible causes of and solutions for pollution viewed in the images from the slideshow.

PART 2

- Students will share journal entries from Part 1 with partners. Students will share their partner's entry with the class.
- The teacher will provide students with newspaper articles about pollution. Teachers may use the following articles or chose an article from GA Studies Weekly.

http://www.ducksters.com/science/environment/air_pollution.php

http://www.ducksters.com/science/environment/water_pollution.php

<http://kids.nationalgeographic.com/kids/stories/spacescience/water-bottle-pollution/>

<http://www.clean-air-kids.org.uk/airquality.html>

<http://teachingkidsnews.com/2013/11/06/3-pollution-shuts-chinese-city/>

<http://easyscienceforkids.com/all-about-pollution/>

<https://kids.niehs.nih.gov/topics/pollution/index.htm>

- Students will locate key vocabulary or unknown words from the text (text rendering).
- Students will combine their words to create a class vocabulary list and define the words together

Approx. Duration of Project: 2 days of 45 minutes each day

on an anchor chart.

- Students will reread the article independently, or with a partner, to increase their understanding of the academic language in context.
- The class will review the slideshow together again now and describe the images using their newly acquired vocabulary.
- Students get into small groups of 4-5 students. Review the research and make a list of 6 verbs used to describe pollution. Direct students to work together to choreograph movement for the 6 verbs and string them together to form a dance. Direct students to select music that they connect to and rehearse their dances.

PART 3:

Student will create an environmental awareness brochure using six facts from the articles they have read and their science resources (books, texts, etc...). They must accurately use the science vocabulary in their persuasive video. A word bank will be provided from the class discussion.

Students will then summarize the project by answering the following questions:

- *How does pollution make us feel and why?*
- *What is something new you learned about pollution while participating in this project?*
- *How can we further reduce the amount of waste that we have?*

*Extension activity to create a reusable shopping bag by recycling an old t-shirt- instructions provided in the link below.

<http://www.scatteredthoughtsofacraftymom.com/2015/09/how-to-make-tote-bag-from-t-shirt-no-sewing.html/2>

REFLECTION

Reflection Questions

- *Name the different types of pollution you saw and describe the effects it has on our world.*
- *How does it make you feel seeing pollution around the world?*
- *Where have you seen pollution in your own environment?*
- *What could you do to help the environment? Can your family do anything together to positively impact the environment?*

DIFFERENTIATION

BELOW GRADE LEVEL:

- Provide sentence starters for students' journal entry writing.
- Provide a template for the brochure.
- Allow for peer tutor and pairings.

ABOVE GRADE LEVEL:

- Turn and talk with partners: *How would you feel if you were in the same situation or you were in that environment?*
- In partners, what do you think caused the pollution in the environment? Come up with possible

Approx. Duration of Project: 2 days of 45 minutes each day

solutions.

- Create electronic brochure in Microsoft Word with template and share within Office 365.

EL STUDENTS:

- Include picture support on the vocabulary anchor.
- Allow students to copy their articles into Microsoft Word Online and use the “Immersive Reader” feature to hear their articles read aloud. (Office365 Student Account>Word Document Online>View>Immersive Reader)
- Provide sentence starters for students’ journal entry writing.
Use first language support to clarify unknown academic vocabulary.
- Provide a template for the brochure.

ADDITIONAL RESOURCES

- Sway PowerPoint of images: <https://sway.com/IT9ZpXuLI9nUt7Gy>
- Ego vs Eco Picture: <http://recyclingsustainability4a.weebly.com/ego-vs-eco.html>

APPENDIX

- Project 1 Rubric

CREDITS

U.S. Department of Education
Arts in Education--Model Development and Dissemination Grants Program
Cherokee County (GA) School District and ArtsNow, Inc.
Ideas contributed and edited by:
Jill McNally, Alisa Moore, Julie Palmieri, Edited by Dr. Carla Cohen, Edited by Jessica Espinoza

Pollution Matters Brochure Rubric

TASK: Persuasive Writing Against Pollution

Task	4	3	2	1
Content Accuracy	All 6 facts in the brochure are accurate.	4-5 of the facts in the brochure are accurate.	2-3 of the facts in the brochure are accurate.	Fewer than 2 of the facts in the brochure are accurate.
Use all vocabulary words for pollution: compost, biodegradable, recycle, reuse, reduce, non biodegradable, littering, pollution, exhaust, aerosol, paper, plastic, aluminum, Ozone Layer	The author correctly used all vocabulary words and defined words unfamiliar to the reader.	The author correctly used at least 10 vocabulary words and defined words unfamiliar to the reader.	The author used at least 6 vocabulary words, but used 1-2 words incorrectly.	The author did not incorporate any vocabulary related to content area or vocabulary is used incorrectly throughout the brochure.
Attractiveness and Organization	The brochure was well produced including attractive formatting and well-organized information throughout.	The brochure was mostly well produced including attractive formatting and well-organized information throughout.	The brochure was somewhat produced including attractive formatting and well-organized information throughout.	The brochure was incomplete and minimal effort was put into producing it.
Sources Cited	Careful and accurate records were kept to document the source of all of the facts and graphics in the brochure.	Careful and accurate records were kept to document the source of most of the facts and graphics in the brochure.	Careful and accurate records were kept to document the source of some of the facts and graphics in the brochure.	Sources were not documented accurately or are not kept on many facts and graphics.

Total Score: _____

Suggested Collected Items

*From the website: <https://www.onegreenplanet.org/lifestyle/home-items-you-can-reuse-over-and-over-again/>

1. Glass Jars, Containers or Cans

Glass and metal are easily recycled, but why not cut down on excess packaging and waste by reusing them? Glass jars and old coffee canisters make great containers for bulk pantry items, desk organizers or bathroom containers. And there are a million ways to [reuse mason jars](#) beyond food [canning](#) — even many pasta sauce brands use jars that are ideal for food preservation. Got a lot of leftover narrow necked beer bottles? Make them into a [set of drinking glasses](#)! Or how about a [wine rack](#), or display shelves out of coffee cans?

2. Gallon Jugs, Plastic Soda Bottles, Takeout and Other Plastic Containers

Beyond using jugs and bottles to store homemade natural cleaners, with a little modification, you can turn those plastic containers into useful household items like this [plastic bottle broom](#)! Make [bird feeders](#) out of old soda bottles, or food bins, shoe cubbies and dustpans/scoops out of [plastic jugs](#). How about making reusable [self watering seed pots](#) or a [cell charging station](#) out of a shampoo bottle? And don't throw out the takeout containers! Many are sturdy, dishwasher safe and excellent for reuse in the kitchen.

3. Newspapers, Magazines, and Paper Bags

Over run by paper? There are lots of [great ways to re-purpose all the paper in your life](#). Get creative and create amazing and useful woven [baskets](#) and [trays](#) out of [magazines](#) and [newspapers](#). Recycle newspapers, grocery bags and magazines as wrapping paper. How about some compostable [seed pots](#)? Or [DIY envelopes](#) out of outdated calendar pages? And if you're really ambitious, make a gorgeous [wood-like flooring with paper bags](#).

4. Clothes, Towels, and Bedding

Don't toss out old towels, clothes and bedding! Cut them up into washable cleaning rags! Or check out these excellent Pinterest ideas for ways to [upcycle old clothes](#) into new! Why not turn those torn t-shirts into beautiful [braided rugs](#)? If you've got sewing skills, turn old flannels into [reusable dusters](#).

5. Seeds

At the end of the growing season, let a couple of your veggies and flowers go to seed, collect the seeds and save them for next season for free! Here's [everything you need to know about harvesting and saving seeds](#) to reuse again and again!

6. Laundry Waste

If you use them, don't toss out those old dryer sheets! They make excellent dusting rags, especially for sucking up pet hair. They work great for scrubbing off soap scum and polishing chrome too! You can even make them into a [dress](#) if you're really determined. Collect the lint from the dryer to make [recycled paper](#) or [paper mache](#), or even [compostable seed pots](#).

7. Plastic Bags

When the box of cereal is empty, save the inner bag, wash, dry and cut to wrap sandwiches. Plastic bags can be used as pet waste bags, or trash bins, or you can reuse them at the grocery store. Better yet, upcycle those plastic bags into nice-looking, sturdy [reusable grocery totes](#)!

8. Bathroom Items

Save old toothbrushes to scrub hard to reach places, like grout and underneath the fixtures on faucets. Or clean old toothbrushes and reuse as eyebrow brushes, hair color applicators or for cleaning tools, electronics or other delicate or hard to clean items. Empty toothpaste tubes can be re-purposed as a funnel by cutting off the bottom, or as a frosting tube for icing cakes. Empty deodorant bottles are perfect for refilling with this [DIY Deodorant Recipe](#)!

9. Broken Dishes

Collect broken china to re-tile outdoor tables, [flower pots](#), paths, or as a unique border for your garden. Use broken china to make a [key fob](#) or jewelry. Plant small plants in old stained coffee mugs.

10. Old Furniture

Refinish or repair rather than tossing old furniture. Re-purpose broken furniture or disassemble and [reuse the wood](#). Hang drawers on the wall to create shelves, shadowboxes or bulletin boards.



Unit Essential Question

How can I use music to evaluate and communicate information about the effects of pollution on people and the environment

PROJECT DESCRIPTION

In this project, students will examine the effects of pollution on the ecosystem in a musical way! This project includes students creating new lyrics to a song about pollution. Students step into role as lyricists and use music to help humans understand the causes and effects of pollution around them.

LEARNING TARGETS

“I Can...”

- Write song lyrics that explain the various types of pollution
- Create an adaptation for a song that relates to pollution and its effects on the environment
- Rehearse and Perform a song for an audience

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ESSENTIAL QUESTIONS

<ul style="list-style-type: none"> • How can I use music to evaluate and communicate information about the effects of pollution on people and the environment?

STANDARDS

Curriculum Standards	Arts Standards
<p>S3L2. Obtain, evaluate and communicate information about the effects of pollution (air, land, and water) and humans on the environment.</p> <p>ELAGSE3RI6: Distinguish their own point of view from that of the author of a text</p>	<p>M3GM.1: Singing, alone and with others, a varied repertoire of music.</p> <p>M3GM.5: Composing and arranging music within specified guidelines.</p> <ul style="list-style-type: none"> • Create rhythmic motives and enhance literature. • Compose simple melodic patterns. • Arrange rhythmic patterns creating simple forms and instrumentation.

KEY VOCABULARY

Content Vocabulary	Arts Vocabulary
<ul style="list-style-type: none"> • Garbage • Pollution • Compost • Biodegradable/non-biodegradable • Reduce, reuse, recycle 	<ul style="list-style-type: none"> • Lyrics: the words of a song • Verse: writing arranged with a metrical rhythm, typically having a rhyme • Chorus: writing arrangement that is a repeated section of a song • Genre: category of a musical composition

Approx. Duration of Project: 2 days of 30 -45 minutes

<ul style="list-style-type: none">• Conservation	such as a rap, ballad, etc...
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TECHNOLOGY INTEGRATION

<ul style="list-style-type: none">• YouTube video: Tom Chapin: Good Garbage Song, Pretty Planet Song (1979) American School in London-https://youtu.be/GXSBHILdboQ• Footprint Calculator website – http://www.carbonfootprint.com/calculator.aspx http://web.stanford.edu/group/inquiry2insight/cgi-bin/i2sea-r2b/i2s.php?page=iscfc# http://footprint.wwf.org.uk/• www.padlet.com• www.quavermusic.com

ASSESSMENTS

Formative	Summative
<ul style="list-style-type: none">• Teacher will check for appropriate usage of unit vocabulary through their song writing.	<ul style="list-style-type: none">• Project 2 Rubric (See Download)

MATERIALS

<ul style="list-style-type: none">• Recycled materials• Computer/tablet if using padlet• Post it Notes• Science journals

Activating Strategy (5- 10 min)

Approx. Duration of Project: 2 days of 30 -45 minutes

- Review the list **Suggested Collected Items** (See Downloads) and find 5-6 items to bring into the classroom. With the class, use Padlet (www.padlet.com) to generate ideas with the class on how we can reuse the items.
- In whole group, use Footprint calculator and discuss their reactions and how their footprint can be improved.

Footprint Calculator website – <http://www.carbonfootprint.com/calculator.aspx>
<http://web.stanford.edu/group/inquiry2insight/cgi-bin/i2sea-r2b/i2s.php?page=iscfc#>

Main Activity

PART 1

- Watch YouTube Video: “Good Garbage” (<https://youtu.be/GXSBHILdboQ>). Discuss in whole group vocabulary such as compost, biodegradable/non-biodegradable, recycle, reuse and reduce.
- As a whole group, discuss the author’s purpose of writing the song. Why is it catchy? Discuss the rhythm, chorus, verse, rhyme, alliteration, stanza, poems, etc.
- As a whole group, discuss well-known songs that students may like to use to create/write a class pollution song. Students will create a chorus for a new pollution song. Discuss the elements of the song in relation to the ELA standards **main idea** and **supporting details**. Separate into 4 groups and have students create verses for the four categories: air, land, water and conservation.

*Strategically assign your students to homogenous groups.

PART 2

- Review “Good Garbage” song in whole group.
- Have the students revise or edit their assigned part for their song.
- Come up with music for the class song using Quaver or GarageBand.

Extension: Students can also create their own instruments to create their music for their group’s songs.

REFLECTION

Reflection Questions

- *What was the author’s purpose for writing the song?*
- *What is the main idea? What are the details in the song?*
- *How does the tone of the song make you feel?*

DIFFERENTIATION

BELOW GRADE LEVEL:

Provide students with the lyrics from the “Good Garbage” song to use as a model for writing their verses including sentence frames and a word bank.

Approx. Duration of Project: 2 days of 30 -45 minutes

ABOVE GRADE LEVEL: Students will create their own version of a pollution song.

EL STUDENTS:

Have students choose 3-5 key vocabulary words from the vocabulary list generated in project one to include in their verse.

Provide all EL students with the lyrics from the “Good Garbage” song to use as a model for writing their verses.

ADDITIONAL RESOURCES

<http://robinfrederick.com/learn-how-to-write-a-song/>
www.quavermusic.com

APPENDIX

- Project 2 Rubric
- Suggested Collected Items

CREDITS

U.S. Department of Education

Arts in Education--Model Development and Dissemination Grants Program

Cherokee County (GA) School District and ArtsNow, Inc.

Ideas contributed and edited by:

Jill McNally, Alisa Moore, Julie Palmieri, Edited by Jessica Espinoza, Edited by Dr. Carla Cohen

Pollution Matters Song Verse Rubric

TASK: Persuasive writing in the form of a song verse showing the causes and effects of pollution.

Task	4	3	2	1
Content Accuracy	All 4 facts in the verse are accurate.	3 of the facts in the verse are accurate.	2 of the facts in the verse are accurate.	Fewer than 2 of the facts in the verse are accurate.
Use all vocabulary words for pollution: compost, biodegradable, recycle, reuse, reduce, non biodegradable, littering, pollution, exhaust, aerosol, paper, plastic, aluminum, Ozone Layer	The authors correctly use 4 vocabulary words and define words unfamiliar to the reader.	The authors correctly use at least 3 vocabulary words and define words unfamiliar to the reader.	The authors try to use at least 2-3 vocabulary, but may use 1-2 words incorrectly.	The authors do not incorporate any vocabulary related to content area or vocabulary is used incorrectly throughout the brochure.
Sources Cited	Careful and accurate records are kept to document the source of all of the content.	Careful and accurate records are kept to document the source of most of the content.	Careful and accurate records are kept to document the source of some of the content.	Sources are not documented accurately.

Total Score: _____



Unit Essential Questions

How can art be used to compare and contrast the land of the Lorax before and after the Onceler?

How do you analyze the mood in a piece of artwork using key vocabulary?

PROJECT DESCRIPTION

In this project, students will listen to the story The Lorax by Dr. Seuss. Students will discuss the art elements they see in the text. They will sketch and use oil pastels to recreate their own scene analysis of the illustrations before and after the Onceler. Students will also relate to the changes of mood throughout the story. Students will then create a persuasive writing piece comparing and contrasting the Lorax's habitat.

LEARNING TARGETS

"I Can..."

- Create a persuasive piece to compare and contrast the scenes in the Lorax's habitat before and after the Onceler
- Create a piece of art that shows the cause and effect of the pollution that occurred in the Lorax

www.artsnowlearning.org

Units provide differentiated ideas and activities aligned to a sampling of standards.

The units do not necessarily imply mastery of standards, but are intended to inspire and equip educators.

Produced through the U.S. Department of Education: Arts in Education—Model Development and Dissemination Grants Program
Cherokee County (GA) School District and ArtsNow, Inc.

Approx. Duration of Project: 2-3 days of 30 -45 minutes

Project Description	Learning Targets
<p>In this project, students will listen to the story <u>The Lorax</u> by Dr. Seuss. Students will discuss the art elements they see in the text. They will sketch and use oil pastels to recreate their own scene analysis of the illustrations before and after the Onceler. Students will also relate to the changes of mood throughout the story. Students will then create a persuasive writing piece comparing and contrasting the Lorax’s habitat.</p>	<p>“I Can...”:</p> <ul style="list-style-type: none"> • Create a persuasive piece to compare and contrast the scenes in the Lorax’s habitat before and after the Onceler • Create a piece of art that shows the cause and effect of the pollution that occurred in the Lorax

ESSENTIAL QUESTIONS

<ul style="list-style-type: none"> • How can art be used to compare and contrast the land of the Lorax before and after the Onceler? • How do you analyze the mood in a piece of artwork using key vocabulary?
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STANDARDS

Curriculum Standards	Arts Standards
<p>S3L2. Obtain, evaluate and communicate information about the effects of pollution (air, land, and water) and humans on the environment.</p> <p>ELAGSE3RI6: Distinguish their own point of view from that of the author of a text.</p> <p>ELAGSE3RL5: Refer to parts of stories, dramas, and poems when writing or speaking about a text, using terms such as chapter, scene, and stanza; describe how each successive part builds on earlier sections.</p>	<p>TAES3.4: Designing and executing artistic and technical elements of theatre</p> <ul style="list-style-type: none"> • Uses technical theatre elements to design costumes, props, sets, sound and lighting. • Incorporates technical theatre elements such as costumes, props, sets, sound, lighting, into dramatizations. <p>VA3PR.1 Creates artworks based on personal experience and selected themes.</p> <p>a. Creates artworks to express individual ideas, thoughts, and feelings from memory, imagination, and observation.</p> <p>b. Creates artworks emphasizing one or more elements of art (e.g., color, line, shape, form, texture).</p> <p>c. Creates art emphasizing one or more principles of design (balance, proportion, rhythm, emphasis, unity, contrast).</p> <p>d. Combines materials in new and inventive ways to make a finished work of art.</p>

Approx. Duration of Project: 2-3 days of 30 -45 minutes

	<p>VA3PR.2 Understands and applies media, techniques, and processes of two-dimensional art processes (drawing, painting, printmaking, mixed-media) using tools and materials in a safe and appropriate manner to develop skills.</p> <ul style="list-style-type: none">a. Creates drawings with a variety of media (e.g., pencils, crayons, pastel).b. Draws lines with varied weights and in varied ways.c. Uses directional lines (vertical, horizontal, diagonal).d. Creates landscape with foreground, middle ground, background.e. Achieves distance through diminishing sizes and placement of objects higher on the page <p>VA3AR.1 Discusses his or her artwork and the artwork of others.</p> <ul style="list-style-type: none">a. Describes how size, colors, lines, shapes, and textures are organized in artwork to create a focus or center of interest (emphasis).b. Demonstrates a respect for art forms and art objects.c. Uses art terminology with emphasis on the elements of art: line, shape, form, color, space, texture.d. Uses art terminology with emphasis on the principles of design. (e.g., balance, proportion, rhythm, emphasis, unity, contrast).e. Recognizes that lines can be used to suggest movement, feelings, sounds, and ideas.f. Points to descriptive, directional, and expressive lines in artworks.g. Explains how texture (implied and actual) is used in two-dimensional shapes and three-dimensional forms.h. Identifies intermediate and complementary colors, tints, and shades of colors.i. Recognizes value as the lightness and darkness of a color.j. Distinguishes between 2-D shapes and 3-D forms.k. Recognizes the division of picture plane into foreground, middle ground, and background.l. Describes how negative and positive space is
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Approx. Duration of Project: 2-3 days of 30 -45 minutes

	<p>related. m. Recognizes and compares symmetrical and asymmetrical balance in artworks.</p>
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KEY VOCABULARY

Content Vocabulary	Arts Vocabulary
<ul style="list-style-type: none"> • Compare/Contrast • Cause and Effect • Pollution • Conservation • Environment • Air Pollution • Land Pollution • Water Pollution 	<ul style="list-style-type: none"> • Lines: an identifiable path created by a point moving in space; can vary in width, direction, and length; Lines can be horizontal, vertical, or diagonal, straight or curved, thick or thin • Color: the element of art that is produced when light, striking an object, is reflected back to the eye • Shape: a flat, enclosed area of an artwork created through lines, textures, colours or an area enclosed by other shapes • Form: refer to a three-dimensional composition or object within a three-dimensional composition • Texture: the perceived surface quality of a work of art • Shade: created when only black is added to a hue. This results in a rich, often more intense and darker color • Warm colors: such as red, yellow, and orange; evoke warmth because they remind us of things like the sun or fire • Cool colors: such as blue, green, and purple (violet); evoke a cool feeling because they remind us of things like water or grass • Proportion: concerned with the scale and size of an object (a whole) in relationship to another object (another whole) • Contrast: a principle of art, referring to the

Approx. Duration of Project: 2-3 days of 30 -45 minutes

	arrangement of opposite elements (light vs. dark colors, rough vs. smooth textures, large vs. small shapes, etc..)
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TECHNOLOGY INTEGRATION

<p><i>The Lorax</i> (Ebook Read-Aloud) by Dr. Seuss: https://www.youtube.com/watch?v=xzf6dQyNN7s</p> <p>Warm Colors Mood- To demonstrate the “before” part of the story: https://www.youtube.com/watch?v=P1j_DThGI9M&feature=youtu.be</p> <p>Cool Colors Mood- To demonstrate the “after” part of the story: https://www.youtube.com/watch?v=p1jpKTYmlzA&feature=youtu.be</p> <p>Vic Munez Artwork: http://time.com/3775724/portraits-with-purpose-vik-muniz-in-waste-land/</p>

ASSESSMENTS

Formative	Summative
<ul style="list-style-type: none">Teacher will observe the students for the understanding of appropriate usage of unit vocabulary through their persuasive writing.	<ul style="list-style-type: none">Persuasive Writing PieceProject 3 Rubric (See Download)

MATERIALS

<ul style="list-style-type: none">The Lorax Book- eBookPastel Card paperBlack SharpiesPencilsPastelsFixatives (after drawing is complete- Spray and let dry so pastel does not smudge)Loose-leaf paper for writing piece
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Activating Strategy (5- 10 min)
<ul style="list-style-type: none">Read and listen to the first half of the eBook of <u>The Lorax</u> by Dr. Seuss.

Approx. Duration of Project: 2-3 days of 30 -45 minutes

Main Activity

PART 1:

- After the first half of *The Lorax* with the students, discuss as a group the art elements they saw while reading.
- Use this *The Lorax* movie clip to help with recalling the mood of the “beginning” part: https://www.youtube.com/watch?v=P1j_DThGI9M&feature=youtu.be
- Students will fold paper in half. (landscape) Label “Before the Onceler” on the left hand side of the paper with center adjustment and “After the Onceler” on the right hand side of the paper with center adjustment.
- Then they will lightly sketch the horizon line, the foreground and the background on both sides of the paper. Once the students sketch, they will use the black sharpies to outline their drawings.
- Students will then use oil pastels to recreate the before scene. This will be where the colors are warm. Remind students to include the characters: Barbaloot Bears, Truffala trees, Hummingfish, and Swammie Swams.

PART 2:

- Read the second half of *The Lorax* with the students. Discuss as a group the art elements they saw while reading the second half of the story.
- Use this movie clip to help with recalling the mood of the “ending” part: <https://www.youtube.com/watch?v=p1jpKTYmlzA&feature=youtu.be>
- Students will then use oil pastels to recreate the “After the Onceler” scene. Remind students to think about how many characters have vanished from the setting. How did the colors change? What happened to the Truffla trees?
- In whole group, teacher will lead a discussion referring to theatrical set rendering. Using the illustrations that the student created we can discuss how a set might be designed and assembled in a theatrical performance.
- Use a sample drawing of the scene done in black and white and have the students experiment with a flashlight and colored light filters to recreate the mood of their illustration as a model of the set.

PART 3:

- To conclude the project, in whole group, discuss the point of view from the main characters (Onceler/ Lorax). Have students pair up and recreate a quick conversation between the characters. Point of view must be clearly identified and supported.
- Students will then create their own persuasive writing piece using their Suess inspired illustration picture to compare and contrast the Lorax’s habitat before and after the Onceler.

Extension Activity: Discuss the artist Vik Munez. Use the pictures attached to discuss his artwork and what inspires him. Students will be able to create their own art pieces using garbage collected.

<http://time.com/3775724/portraits-with-purpose-vik-muniz-in-waste-land/>

REFLECTION

Reflection Questions

Approx. Duration of Project: 2-3 days of 30 -45 minutes

- *How does the Land of the Lifted Lorax compare after the Onceler?*
- *How would you describe the mood of the scene before and after the Onceler?*
- *What was the main cause of the destruction to the Land of the Lifted Lorax?*

DIFFERENTIATION

BELOW GRADE LEVEL:

Folded paper available and provide pencil sketch of background, foreground and horizon line. Provide sentence starters for students. Include a visual word bank for additional support.

ABOVE GRADE LEVEL: Third Panel of the storyboard with the possibly of the UNLESS scene and how they think it would look (possible outcomes, new small plants growing, grass beginning to grow again etc...) .

EL STUDENTS:

Make sure to use the ebook link provided below because it has the words to the story along with the pictures.

ADDITIONAL RESOURCES

The Lorax eBook:

<https://youtu.be/aKmbSjIXzFk>

APPENDIX

- Project 3 Rubric

CREDITS

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Ideas contributed and edited by:

Jill McNally, Alisa Moore, Julie Palmieri, Edited by Dr. Carla Cohen, Edited by Jessica Rosa



Pollution Matters Persuasive Essay

TASK: Students will create a picture illustrating The Lorax's habitat before and after the trees are cut down. Compare and contrast the two illustrations in a persuasive essay.

Task	4	3	2	1
Content Accuracy	The position statement provides a clear, strong explanation comparing and contrasting the Lorax's habitat before and after trees were cut down.	The position statement provides a mostly clear explanation comparing and contrasting the Lorax's habitat before and after the trees were cut down.	The position statement provides a somewhat clear explanation, comparing and contrasting the changes in the Lorax's habitat.	The position statement and explanation of the two scenes is unclear and lacks explanation.
Vocabulary words: pollution, compost, biodegradable, recycle, reuse, reduce, non biodegradable, littering, pollution, exhaust, aerosol, paper, plastic, aluminum, Ozone Layer	The author correctly uses all vocabulary words and defined words unfamiliar to the reader.	The author correctly used at least 10 vocabulary words and define words unfamiliar to the reader.	The author tried to use at least 6 vocabulary words, but used 1-2 words were used incorrectly.	The author did not incorporate any vocabulary related to content area.
Artwork Analysis	Accurately described several dominant elements or principles used by the artist and accurately related how they were used by the artist to reinforce the theme, meaning, mood, or feeling of the artwork.	Accurately described a few of the dominant elements and principles used by the artist and related these to reinforce the theme, meaning, mood, or feeling of the artwork.	Described some dominant elements and principles used by the artist, but had difficulty describing how these related to the meaning or feeling of the artwork.	Had trouble picking out the dominant elements.

Total Score: _____