Interdisciplinary Unit

Kindergarten Unit 5

2015-2016

Concept: ENVIRONMENTALISM

Essential Question:

Why is taking care of the Earth important?

Deepening Questions:

What makes up the Earth?

Why do we need healthy soil?

How do the sun, moon, stars and Earth interact?

What changes do you notice in the sky during the day and at night?

Why is the sun important for the Earth?

What are different ways to communicate information other than a story?

What tools do authors use to communicate?

How do people help and harm the Earth?

How can I help take care of the Earth?

How can we use measurement to describe and compare objects?

Suggested Trade Book Resources:

Dirt: The Scoop on Soil (Amazing Science) by Natalie M. Rosinsky (Lexile: 710)

Fathers, Mothers, Sisters, Brothers: A Collection of Family Poems by Mary Ann Hoberman (GR: L)

Here's A Little Poem: A Very First Book of Poetry by Jane Yolen and Andrew Fusek Peters

Silly Street: Selected Poems (I Can Read Book 2) by Jeff Foxworthy (GR: O)

The Changing Environment by Deborah Chancello

10 Things I Can Do to Help My World by Melanie Walsh (Lexile: 330, GR: K)

Rachel Carson and Her Book That Changed the World by Laurie Lawlor (Lexile: 890)

Keeping Water Clean Paperback by Helen Frost (Lexile: 410, GR: J)

I Can Save the Earth!: One Little Monster Learns to Reduce, Reuse, and Recycle by Alison Inches (Lexile: 610)

The Enormous Potato by Aubrey Davis (GR: H)

Just How Long Can A Long String Be?! by Keith Baker (GR: J)

Hook:

Starry Night by Vincent Van Gogh

Vimeo: video of Starry Night in action here: https://vimeo.com/36466564 (requires free sign up)



Explore the Description (What do you see in the painting?)

* Background: rolling hills of mountains
* Middle: VillageForeground: Cypress tree
* (not shown, wheat field around cypress tree)
* \*brightest star in the painting is actually Venus
* Waning gibbous moon

Section 1: Earth Materials

States: Michigan, Wisconsin (NOT: Indiana, Minnesota, Missouri, Ohio)

Illinois- cover as part of how plants grow best (NGSS K-ESS3)

Deepening Questions:

What makes up the Earth?

Why do we need healthy soil?

* + - Rock and Soil unit: <http://www.kindergartenkindergarten.com/2012/04/rock-and-roll.html> (also attachment)
		- Rock (and soil/3R’s activities) (attachment)
* Soil and its Features
	+ Read Dirt: The Scoop on Soil (Amazing Science) by Natalie M. Rosinsky
	+ Observing soil
		- Soil activities (especially Dirty Dirt and Super Soil) (attachment)
* Rock Characteristics
	+ Rock sizes (pebbles, sand
	+ Describing rocks
* What holds water (absorbency)
	+ Different kinds of earth materials (soil, sand, clay)
* Intro to soil and plants
	+ Illnois- Read Weeds Find a Way by Cindy Jenson-Elliott (how plants change the environment to meet their needs)

Section 2: Earth and Space (If not already covered in Unit 2)

States: Ohio, Missouri, Indiana

Other states may cover if time allows.

Deepening Questions:

How do the sun, moon, stars and Earth interact?

What changes do you notice in the sky during the day and at night?

Why is the sun important for the Earth?

* Observing day and night
	+ - From Morning to Night reading passage (attachment)
* Night sky
	+ Moon
	+ Changes in the moon (NOT vocabulary specific)f
		- Moon early reader (only use first reader in the attachment)
* Day sky
	+ Changes in the sky (sun)
		- A Big Star reading passage (attachment)
		- Flow map: http://larremoreteachertips.blogspot.com/2014/01/wrapping-up-day-and-night.html (attachment)
	+ Sun and shadows
		- Shadow fun (attachment)
* Model of the orbit (brief)-students should understand the basic of Earth orbiting the sun and the moon orbits the Earth
	+ - Model of Sun, Earth, moon (attachment)
* Sun as an energy source
	+ Why we need the sun

Section 4: Types of Informational Text

States: all

Deepening Questions:

What are different ways to communicate information other than a story?

What tools do authors use to communicate?

* Review parts of a book (taught throughout the year)
* Features of informational text

Use any of the information texts covered in previous units to demonstrate these features

* + - All About Me information text features book (TPT $3): https://www.teacherspayteachers.com/Product/Informational-Text-Features-All-About-Me-Book-716377
		- Non-fiction text list: http://aintheclassroom.blogspot.com/2012/02/non-fiction-writing-checklist.html
	+ Titles and Subtitles
	+ Labels
		- Label the Teacher: http://mrsleeskinderkids.blogspot.com/2011/09/labeling-lesson.html
	+ Diagram
	+ Map
	+ Illustration
	+ Chart/table
	+ Caption
* Posters
* Pamphlets
* News article
* Web page
* \*Create a poster, brochure, pamphlet (complete after last section on Earth Day)

Section 4: Poetry

States: all

Deepening Question:

How can poems tell a story?

* + - Poetry Unit (TPT $5): https://www.teacherspayteachers.com/Product/Sweet-Sweet-Poetreat-Poetry-Unit-for-K-1-1828761
* What is a Poem
	+ Read Fathers, Mothers, Sisters, Brothers: A Collection of Family Poems by Mary Ann Hoberman
* Types of Poems
	+ Here's A Little Poem: A Very First Book of Poetry by Jane Yolen and Andrew Fusek Peters
	+ Silly Street: Selected Poems (I Can Read Book 2) by Jeff Foxworthy
* Reading Poems
	+ - Collection of elementary poems (attachment)
	+ Favorite poems
* PERFORMANCE TASK: Persuasive-The best poem is….” Students will use a graphic organizer to draw three details to support why they picked the poem as the best.
* Writing Poems

Section 5: Earth Day

Deepening Question:

How do people help and harm the Earth?

How can I help take care of the Earth?

* Earth’s natural Resources (Conservation)
	+ - Read Kingfisher Readers L5: The Changing Environment by Deborah Chancello
	+ How we use plants and animals
	+ How we use water
		- Read All the Water in the World by George Ella Lyon and Katherine Tillotson
	+ How we use energy
* Cause/Effect- How We Harm the Earth
	+ - Read Rachel Carson and Her Book That Changed the World by Laurie Lawlor
	+ Pollution
	+ Using too many resources
* Recycle, Reuse, Recycle
	+ Read The Soda Bottle School: The True Story of Recycling Teamwork, and One Crazy Idea by Laura Kutner
		- Sorting Trash (attachment)
		- Where does the garbage go? Activity: http://littlekinderwarriors.blogspot.com/2013/04/best-earth-day-experiment-ever.html
* Ways to Help the Earth
	+ 10 Things I Can Do to Help My World by Melanie Wals
		- Read the book *Earth Smart* (wegivebooks.org)
		- Earth Day Emergent Reader (attachment)
		- Save Your Paper reading passage (attachment)
	+ Keeping Water Clean Paperback by Helen Frost
	+ I Can Save the Earth!: One Little Monster Learns to Reduce, Reuse, and Recycle by Alison Inches
* PERFORMANCE TASK: Persuasive-Take Care of the Earth! Students will brainstorm ideas about why people should take care of the Earth. It can culminate in making a poster.

Section 6: Building Teen Numbers

\*not connected to unit

States: all

Deepening Questions:

What is an efficient strategy for counting teen numbers?

* Compose and Decompose Numbers 11 to 19
	+ Make Number 11 to 15
		- Build Teen numbers (attachment)
	+ Take Apart Numbers 11 to 15
	+ Make a Table: problem solving strategy
	+ Make Numbers 16 to 19
		- Composing teen numbers (attachment)
		- Fix my broken heart (attachment)
		- March Place value cut and paste (attachment)
	+ Take Apart Numbers 16 to 19

Section 7: Measurement

States: all

Deepening Question:

How can we use measurement to describe and compare objects?

* Measurement
	+ Measurement Unit (TPT $4.50): <https://www.teacherspayteachers.com/Product/Measurement-1044624>
		- Measurement games (attachment)
		- Measurement activities: <http://www.kindergartenkindergarten.com/2012/06/problem-solving-measurement.html>
	+ Compare Length
		- Read Just How Long Can A Long String Be?! by Keith Baker <http://larremoreteachertips.blogspot.com/2012/05/direct-comparisons-length.html?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed:+blogspot/wbEiy+(Chalk+Talk:+A+Kindergarten+Blog)&utm_content=Google+Reader>
		- Shorter/Longer (attachment)
	+ Compare Height
	+ Guess, Check, Revise (problem solving strategy)
	+ Compare Weight
		- Compare weight (attachment)
		- Comparing weight with a balance (attachment)
	+ Describe Length, Height, and Weight
		- Read The Enormous Potato by Aubrey Davis
	+ Compare Capacity