Ocean Protection & Preservation

Text: 'What's the Commotion in the Ocean?' by Nyasha Williams

Core Content Objectives

- State a problem that our oceans are experiencing.
- State a way that they can help protect our oceans.

Language Arts Objectives

- Carry on a dialogue or conversation with an adult or same-aged peer, initiating comments or responding to partner's comments
- Recognize and call classmates and teacher by name
- Ask or answer questions beginning with who, what, where, when, or why
- Adapt the volume of one's voice to different settings and different purposes
- Understand and use intonation and emphasis to ask a question, express surprise, agreement, displeasure, and/or urgency
- Wait turns to speak in a group
- Attend and listen while others speak during a group activity

Listening & Learning

- With prompting and support, actively engage in group reading activities with purpose and understanding
- Communicate with individuals from different cultural backgrounds
- Carry on a dialogue or conversation with an adult or same-aged peer, initiating comments or responding to partner's comments
- Describe an illustration and how it relates to the text
- With prompting and support, ask and answer who, what, where, when, why, and how questions about 'What's the Commotion in the Ocean?'.
- With prompting and support, retell important facts and information from 'What's the Commotion in the Ocean?'.
- With prompting and support, use the word 'affirmation' acquired through: conversation, reading and being read to, and responding to 'What's the Commotion in the Ocean?'.
- Point to the front and back cover, and the spine of the book.

Core Vocabulary

Ecosystem

a community of living things, together with their environment.

A pond is an interesting ecosystem to study.

Status Quo

the existing state; conditions as they are at a given time.

Unsustainable

not able to be maintained at the current rate or level.

upsetting the ecological balance by depleting natural resources.

Unattainable

not able to be reached or achieved.

Dwell

to have one's home in; live or stay in.

Dead zones

areas of large bodies of water, typically in the ocean but also occasionally in lakes and even rivers, that do not have enough oxygen to support marine life

Pollute

contaminate (water, air, or a place) with harmful or poisonous substances. The factory polluted the air with smoke. The company polluted the river by dumping oil in the water.

Advance Preparation

Reduce

to make less in amount or size. The new roads reduced traffic jams.

Reuse

to use again or use more than once. We can reuse those plastic bags, so don't throw them away.

Recycle

to put through a process that allows used things to be reused.

The city recycles old tires for use in making new roads.

Sustainable

of or related to a method of managing or using a resource so that the resource is never used up or forever damaged. Sustainable farming usually involves rotating the crops so that the soil stays rich.

Partake

to take part; participate (usu. fol. by "in").

We all partook in the neighborhood block party last summer.

Debris

scattered pieces of waste or remains. A pile of debris was all that remained after the fire. Is this a land animal or a water animal? (Activity)

Create a Powerpoint slideshow of various animals, one per slide. Animals should be in

random order with some from the land and some from the water.

What animal could live here? (Activity)

Create a Powerpoint slideshow of various habitats, one per slide. The slides in between

each habitat should show animals that would find that habitat to be the perfect home.

<u>Aquatic Habitats</u> (Activity)

Create a Powerpoint slideshow of various aquatic habitats, one per slide. The slides in between each habitat should show animals that would find that habitat to be the

perfect home.

Healthy Water space/Non-Healthy Water space (Activity)

Create a Powerpoint slideshow of randomly ordered pictures of oceans in various

conditions one per slide.

Lesson 2 Part 1:

Habitats

Introduce habitats to the class: A habitat is a place where an organism makes its home.

A habitat meets all the environmental conditions an organism needs to survive.

Q: Ask students what are some things that animals/people and plants need to survive?

Animals/people: shelter, water, food, and space.

Plants: light, air, water, and soil

<u>Importance of Habitats</u>

Q: Ask students why habitats matter? Why are they so important?

A habitat consists of the ecosystem or environment in which an animal, plant or other living organism has lived and evolved over a considerable period of time.

A habitat provides all the necessary ingredients they need to survive. Without a habitat, a creature is virtually homeless and faces certain death.

No organism on Earth is an isolated individual. Every form of life is part of an ecosystem. In reality, the entire planet is one ecosystem.

Habitat destruction is the single most important danger to wildlife. Habitat loss is harmful, not only to a single kind of animal or plant, but to entire ecological communities. There are few places in the world that have not been altered, damaged, or destroyed by the destruction of natural habitats.

Part 2:

Is this a land animal or a water animal? (Activity)

Show students randomly ordered pictures of various animals one-by-one.

Q: Call upon students with raised hands to describe whether the animal lives on land or in water.

What animal could live here? (Activity)

Show students randomly ordered pictures of various habitats.

Q: Call upon students with raised hands to describe what animals could live in those various habitats.

Aquatic Habitats (Activity)

Show students randomly ordered pictures of various aquatic habitats.

Q: Call upon students with raised hands to describe what animals could live in those various habitats.

Current states of our oceans

(Show students a globe.) Oceans and seas cover over 70 percent of the Earth's surface and hold 97 percent of all the water on Earth.

The oceans are responsible for making conditions on Earth suitable for us to live on. Our rainwater, drinking water, weather systems, and climate are all ultimately provided and kept in balance by the oceans. We rely on them as a major source of the food we eat, and they produce the majority of the oxygen that we breathe.

For hundreds of years, humans have thought that oceans were so massive, and the animals in them so infinite in number, that our actions as humans could not possibly harm them. But we now know that this is not the case. The threats that our actions pose are significant, and they can have far-reaching effects.

The amount of plastic in the ocean is expected to double in the next 15 years, and by 2050 there could be more plastic than fish in the sea (by weight).

There are giant plastic islands floating on the ocean surface, and beaches around the world are increasingly littered with plastic rubbish even in the Arctic.

Healthy Water space/Non-Healthy Water space (Activity)

Show students randomly ordered pictures of oceans in various conditions one-by-one.

Q: Call upon students with raised hands to describe if the oceans shown are healthy or not.

Part 3: Read 'What's the Commotion in the Ocean?'

Model the different parts of a book to the class:

Front Cover
Spine
Back Cover
Title
Names of the Author & Illustrator

- Ask students what an author does.
- Ask students what an illustrator does.

Reflect on the front cover with the class. Have students take a moment and think about what they see on the cover and what they think the book might be about.

• Have students share their thoughts about what they see on the cover and what they think the book might be about.

Explain to the kids that this book is about a mermaid who is going to tell us what is happening in our oceans and what things we can do to protect them.

Start Reading the Book:

On each page have students discuss the illustrations. Make sure to reflect on the state of the ocean, who/what is in the picture and what is happening in the various scenes.

Questions for reflection at the end of the book:

- What are some problems our oceans and aquatic habitats are facing?
- What are ways you can care for our oceans and aquatic habitats?

After Reading

★ Discussion Thoughts & Questions to Ask (Use the illustrations to help younger students answer questions)

- → What are some of the problems the oceans are experiencing?
- → What are some ways we as individuals can help protect and take care of our oceans?
- → What are some ways we as students can get our school to help implement practices and systems that protect and take care of our oceans and planet? (Such as composting in the school cafeteria and classrooms, planting school gardens or nature corridors with endemic native plants and trees, or developing a green purchasing program that takes into account the environmental impact of purchases (packaging, recycled materials, sustainable production.)
- → What are some ways we as students/as a school, can get companies and organizations adopt business practices and systems to help protect and take care of our oceans and the earth?

Extension Activities

1. Ocean Animal Research

Based on age level this can be done as a whole group as a class, divided into groups, or partnered students.

Have students learn about various ocean animals and how they are doing in the ocean currently. Students can learn about specific ways to protect that animal and its natural habitat.

2. Ocean/ Nature / Water / Earth Activism

Based on age level this can be done as a whole group as a class, divided into groups, or partnered students.

Have students find a way to creatively protect and take care of our oceans and the earth

- → signs /banner/ t-shirts
- → write a book
- → create a presentation for the principal with ways students can get our school to help implement practices and systems that protect and take care of our oceans and planet
- → find a way to reach companies and organizations about their impact on the environment and present the importance of them adopting business practices and systems to help protect and take care of our oceans and the earth
- → create a video commercial for tv, Youtube or Tiktok highlighting the state of our oceans and ways to help protect and take care of our oceans and the planet

3. On Sight Water Preservation/Conservation Field Trip

Based on age level this can be done as a whole group as a class, divided into groups, or partnered students.

Even in landlocked locations, there are organizations and people doing this work being aware of the interconnectedness of the world's waterways. In fact, reports estimate that 80 percent of trash in the ocean originates from inland sources.