



Save Our Seas: NAMEPA's Parent Survival Series

One of the many challenges we are facing with the COVID-19 virus is the closing of schools in order to mitigate the impacts of the virus on our communities. For many, this means trying to work remotely while maintaining the intellectual curiosity and engagement of our children. As a Mother of two (now grown) children, I recall how the first snow day (in the northeast of the United States) there was excitement, shoveling, and playing. The second day was more mundane. The third day...???

NAMEPA wants to support parents during this challenging time by providing you with weekly activities for students K-12 that will not only enrich your child's education, but also broaden their interest in the marine environment. To support ocean literacy, we will supply a weekly lesson plan with built-in activities (30-minute lessons). This will further be supplemented by social media posts on NAMEPA's [Facebook](#) page where we will be targeting a specific activity or area of engagement for you to further explore.

As a global community, we will conquer the COVID-19 virus. How great would it be if we can help to Save Our Seas in the process? If you are a parent with students/children at home, or know one, we hope that our Parent Survival Series is helpful! Also, please share your ideas—we are all in this together!

Stay well—AND sane!

Best always,

Carleen

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Parent Survival Series

Lesson Plan Week 1

Ocean Literacy Principle 1 – *The Earth has one big ocean with many features*

Specific Learning Outcome

Your kids will learn how the ocean floor changes over time and how all water on earth is connected.

Guiding questions: Ask your kids what they know about...

1. The water around them?
2. How do they interact with the ocean?
3. How did the ocean get its depth?
4. How does the ocean play a part in the water cycle?

Day 1

Read with your child:

The ocean is the defining physical feature on our planet Earth—covering approximately 70% of the planet's surface. There is one ocean with many ocean basins, including the Pacific, Atlantic, Indian, Southern and Arctic.

The five ocean basins contain many different geologic features including trenches, abyssal plains, continental shelf and undersea mountains.

Ask your child what they know about:

- 1) The Pacific Ocean?
- 2) Mariana's Trench
- 3) Mid-Ocean Ridge?
- 4) The Great Barrier Reef

The **Pacific Ocean** basin is the oldest and largest of all covering about 30% of the earth's surface.

Mariana's Trench lies in the Pacific basin and is the deepest known area of the ocean at 11 km (36,200 feet)

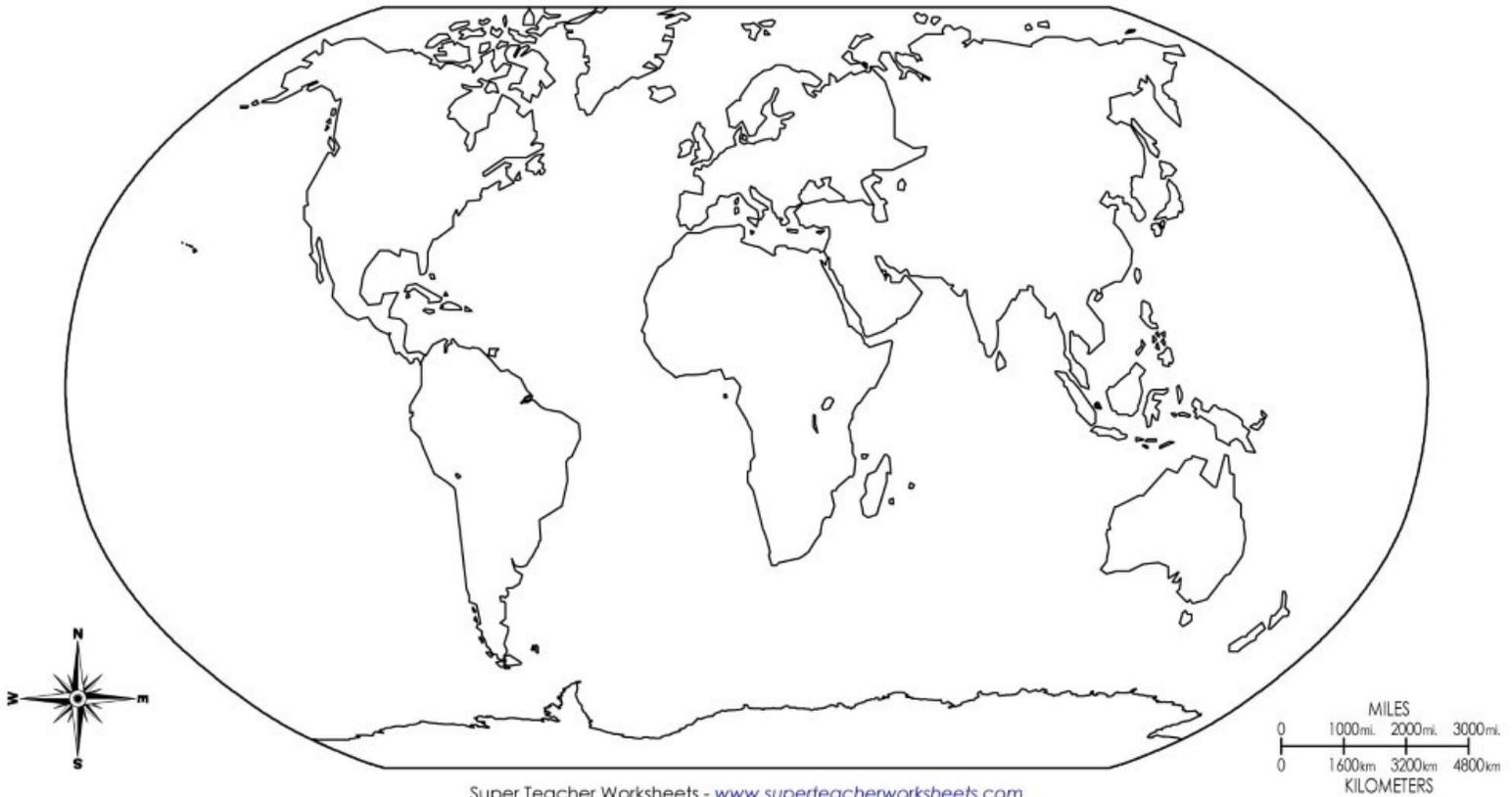
The **Mid-Ocean Ridge** is the longest mountain chain on Earth and it's underwater! It starts in the Arctic ocean and runs 50,000 km through the Atlantic past Africa, Asia and Australia, across the Pacific and ends on the West Coast of North America!

The **Great Barrier Reef** is the world's largest living structure at 2,600 km.

Activity: Continents and Oceans of the World
Principle 1: The Earth has one big ocean with many features

Label the seven continents and five oceans of the world in the map below? What other features can you label on the map: glaciers, mid-ocean ridge, Great Barrier Reef?

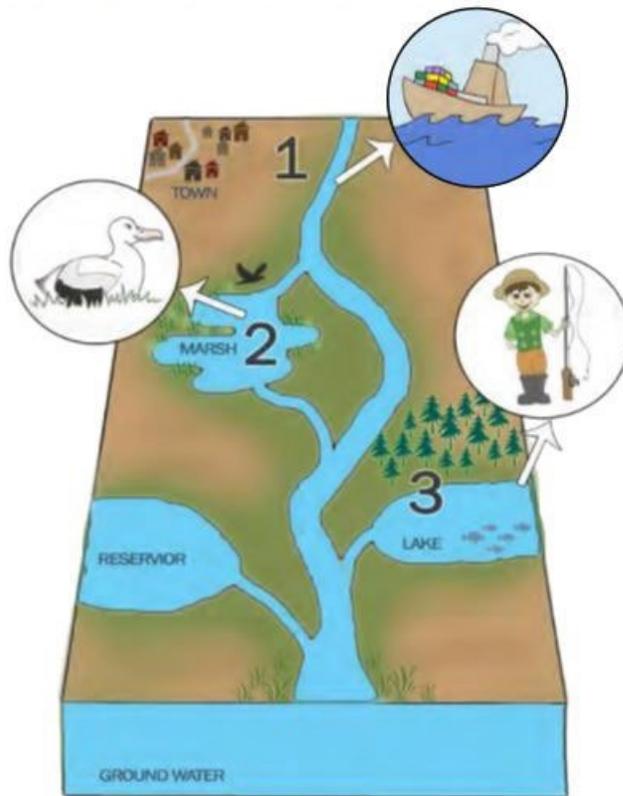
Continents and Oceans of the World



Day 2:

Read with your child:

The ocean is an integral part of the water cycle and is connected to all earth's water reservoirs via evaporation and precipitation processes. The ocean is connected to major lakes, watersheds and waterways because all major watersheds on Earth drain to the ocean. Rivers and streams transport nutrients, salts, sediments and pollutants from watersheds to estuaries and to the ocean.



Watershed map showing 3 properties is just one example of how water flows to the ocean. A watershed is an area of land where all water flows to a common point, usually starting from small streams or rivers into much larger holding areas, lakes or oceans. Features of watersheds include groundwater, streams, rivers, lakes or reservoirs, marshes (estuaries) and the ocean.

Ask your child what they know about:

- 1) Groundwater
- 2) Streams and Rivers
- 3) Lakes and Reservoirs
- 4) Marshes and Estuaries

Groundwater is water stored beneath the earth surface in small spaces or fractures in rocks

Streams and Rivers is how water is moved along in a watershed

Lakes and Reservoirs is the holding tank or storage of fresh water

Marshes and Estuaries serve as buffer zones (stabilizing shorelines), act as water filtration systems and provide a nursery for many small animals



Activity: Building a Watershed

Principle 1: The Earth has one big ocean with many features

Click the link to view the pdf lesson!

[*Educator's Guide to Marine Debris - Lesson 4: Building a Watershed*](#)

This lesson can be done using the general terms of a watershed or maybe using examples of the watershed near you! Have your child name and draw some of the local streams, rivers, estuaries, bays and the ocean near you OR pick one in a different country and learn something new!

Follow Up Questions:

1. Once the water gets to the Oceans, how does it get back to the streams and rivers?
(evaporation and condensation)
2. What is the largest watershed area in the United States?
(Mississippi River Watershed)
3. Does your state or community feed into it?
(31 states feed into the MRW)
4. If a soda can was dropped in the Potomac River in Washington DC, what ocean would it end up in?

Need more? Try going back up to the world map and shading in the general area of the larger water sheds, in the US or globally.