# WHO CALLS OUR OCEAN HOME



## **Overview and Objectives**

Get ready for a wild Ed-venture, where we plunge into the wondrous deep blue oceans and meet some of the quirky and lovable creatures that inhabit it. Let's Join Pru, the majestic Blue Whale, and dive deep into an exciting world of discovery!

Here are definitions for the vocabulary given:

- Bioluminescent: Refers to the natural ability of some organisms to produce light, typically with a blue or green hue.
- **Ecosystem:** A collective community of organisms, including plants, animals, and non-living things, that cooperate with one another to maintain their survival.
- **Endangered species:** A title given to specific group of animals, plants, or other organism that is at risk of becoming extinct, meaning there is a very high risk for the entire population of that species to not exist.
- **Interconnected:** Refers to the relationship between things that are linked or connected to each other in some way, forming a vast network or a puzzle-like structure.
- **Migrating:** The often seasonal movement of animals from one region to another, usually in search of food, escaping harsh weather conditions, or to find mates.

# Who is Pru?

Meet Pru, the Adventurous Blue Whale!

Pru is a friendly blue whale who spends her days exploring the vast ocean and making new friends along the way. Being one of the largest creatures on earth, blue whales like Pru are much bigger than dinosaurs, with a length of three lined-up school buses!

Despite their large size, blue whales are picky eaters and feed mainly on krill and other tiny shrimp-like creatures. However, they must consume over 4 tons of krill every day to fill their massive stomachs! Unlike humans, blue whales don't have teeth. Instead, they use baleen, a comb-like material that filters out food from the water.

Pru travels extensively, **migrating** from cold polar waters to warmer tropical waters during winter in search of food. During these long voyages, she enjoys chatting with her friends. Blue whales communicate with each other via song, and their songs can travel for miles throughout the water!

Sadly, Pru and her fellow blue whales are on the **endangered species** list. If you want to learn more about how you can help, visit the Whale and Dolphin Conservation at <u>us.whales.org</u> for further information!

### Our Big Blue Ocean

There are 5 main oceans on our big blue planet. Each with their own special **ecosystems**.

- 1. <u>Pacific Ocean</u>: The largest and deepest ocean on Earth, the Pacific Ocean spans the area between Asia and Australia to the east and the Americas to the west.
- 2. <u>Atlantic Ocean:</u> The Atlantic Ocean is the second largest ocean and lies between the Americas to the west and Europe and Africa to the east.
- 3. <u>Indian Ocean:</u> Situated to the south of Asia, to the west of Australia, the Indian Ocean is the third largest ocean.
- 4. <u>Southern Ocean</u>: The Southern Ocean encircles Antarctica and is sometimes considered the southernmost part of the Atlantic, Indian, and Pacific Oceans. It's the smallest of the five oceans.
- 5. <u>Arctic Ocean:</u> The smallest and shallowest of the oceans, the Arctic Ocean is located in the Northern Hemisphere and surrounds the North Pole.

The oceans are all **interconnected** and play crucial roles in keeping the Earth's climate steady, supporting marine life, and affecting weather all around the world.

### Ocean Zones

Oceans are spilt into different zones. Some of the zones are hundreds of feet below the ocean's surface, and are home to some really crazy looking critters.

#### 1. Sunlight Zone (Epipelagic Zone):

- This is the topmost layer of the ocean where sunlight penetrates.
- It's home to many marine plants and animals, including fish, dolphins, and sharks.

#### 2. Twilight Zone (Mesopelagic Zone):

- Below the sunlight zone is the twilight zone, where sunlight is scarce.
- Animals in this zone have adapted to low light conditions, and some bioluminescent creatures can be found here, like plankton and some jellyfish.

#### 3. Midnight Zone (Bathypelagic Zone):

- The midnight zone is much darker and deeper, and sunlight can't reach here.
- Strange and mysterious creatures like anglerfish and giant squids live here.

#### 4. Abyssal Zone:

- This is one of the deepest parts of the ocean, where extreme pressure and cold temperatures prevail.
- Unique organisms, such as giant tube worms and deep-sea cucumbers, inhabit this zone.

Next we are going to do an activity where we learn about what animals live in these zones!



SUNLIHGT ZONE



#### **TWLIGHT ZONE**



MIDNGIHT ZONE

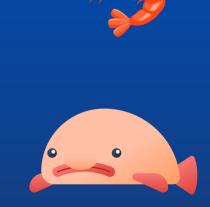




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## Ocean Zones Activity

The ocean is a wondrous place, with different neighborhoods for each critter. So why not make a mini ocean of your own? Get crafty with these materials:

- Option 1:
  - Blue paint strips
  - Ocean animal stickers (or DIY cut-outs)
  - Colored pencils or markers
- Option 2 (if no paint strips):
  - Blue construction paper
  - Ocean animal stickers or small print outs
  - $\circ$  Color pencils
  - Ruler (to divide your ocean zones)

Now, let's dive in and create!



### Lets Create!

Here's how to create your own ocean zones chart:

- 1. Grab a paint strip or paper, then label each section with the different ocean zones from the sunlight zone (the lightest color) to the abyssal zone (the darkest color).
- 2. Time to bring in the ocean crew! Using the hints provided, place animal stickers or cutouts in their proper zone.
- 3. Write down the name of each animal and an observation you make about them.
- 4. Now, pump up the fun factor by adding some divers or ships cruising alongside the ocean buddies you've collected!

Get ready to make waves with your new ocean chart!

#### SEND YOUR OCEAN ZONE PROJECTS TO:

INFO@CAPECODMARITIMEMUSEUM.ORG

