Write To Learn

Name: _____
Date: _____
Class: _____

I'm learning from: _____

I'm learning from: _____

I see:	I know:
I hear:	I notice:
I wonder:	I connect:

ARIZONA GEOGRAPHIC ALLIANCE

I'm learning from: _____

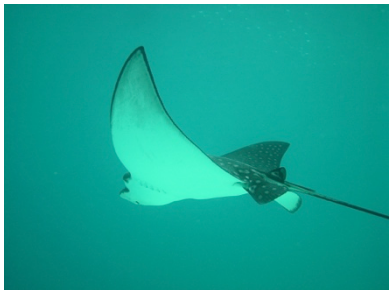
I have learned about: _____

I remember:	Key points in my own words:
Something new is:	I will use what I learned when/by:
I answered:	I would still like to investigate:

ARIZONA GEOGRAPHIC ALLIANCE

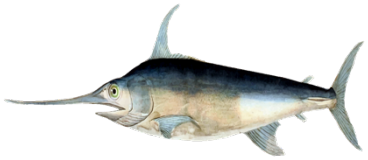
Epipelagic Zone
Sunlight Zone
Surface- 200 Meters/660 Feet





The top layer of the ocean closest to the surface is called the sunlight zone. This zone gets the most amount of light from the sun. Since this zone gets sunlight, it is the warmest. Plant life also grows in this layer because it can get its energy from the light. One type of marine animal that gets its food from the sea and from the sun is the coral reef. The reef might look like plain rock, but it is actually made up of groups of tiny polyps (sea animals that are shaped like tubes). In addition to plants, most marine animals live in the sunlight zone. There is a lot of available food, so more animals can survive. Often, animals in this layer are colorful. Sea turtles and stingrays also live in this layer.

Mesopelagic Zone
Twilight Zone
200-600 Meters/660-3,300 Feet



Just below the sunlight zone is the twilight zone. This zone still gets some sunlight, but is colder. Colors start to fade in this layer of the ocean and the pressure is stronger. Marine life at this layer often has adaptations like larger eyes. Larger eyes allow more light into the eye and help these animals to see better. Animals found at this layer might also glow. Plants cannot get energy from the sun at this layer so there is little or no plant life. Animals have to hunt and hide so they do not get eaten. Examples of twilight zone animals include cuttlefish, swordfish, and wolf eels.

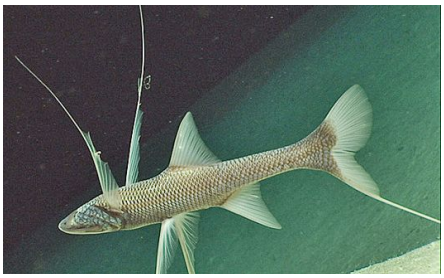
Bathypelagic Zone
Midnight Zone
1,000-4,000 Meters/3,300-13,100 Feet



The third layer of the ocean is the midnight zone. It is called the midnight zone because almost no light reaches this layer. It looks dark as night to the human eye. The pressure at this layer is very high. The temperature is very low at around 4 degrees celcius or 39 degrees fahreinheit . This cold, dark, and high-pressure layer is not an easy place to live. Animals adapt by finding other ways to see. They often have small eyes or no eyes at all. They have bodies that make the most of what food they find. They sometimes have transparent or see through skins. Animals at this layer include giant squid, jellyfish, and some shelled-animals.

Abyssopelagic Zone
Abyss Zone
4,000-6,000 Meters/13,100-19,700 Feet

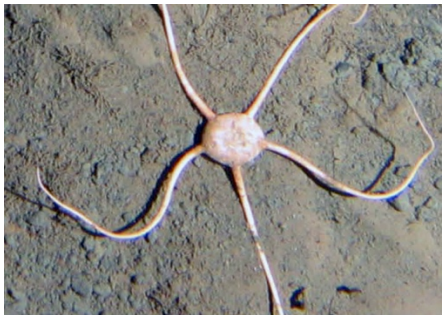




The ocean floor deep underwater is known as the abyss zone. It is completely dark here. The bottom of the ocean is covered in muddy dirt that is made from dead animals and their parts. Many marine animals at this layer eat dead animals who have sunk to the bottom. They might also eat animals feeding on dead animals. Some animals also get their food from the ocean mud. These animals adapt to find food where they can. Some animals have built-in fishing lures and lights to attract prey. They usually move and mate slowly to save energy. Many animals in the abyss zone are blind since it is too dark to see well. Animals at this layer include some kinds of shrimp, dumbo octopus, and tripod fish.

Pictures from: http://www.aquariumofpacific.org/

Hadalpelagic Zone
Trench Zone
6,000-11,000 Meters/19,770-36,000 Feet




The deepest layer of the ocean is called the trench zone. This is because the ocean fills deep underwater canyons called trenches. Scientists are still learning about the animals who live here because it is difficult to explore this layer of the ocean. The pressure in the trench zone is 8 tons per squre inch. Marine life in the abyss has to adapt to find food where it can and to make the most of what food is found. Animals here also eat marine snow—bits of decayed animals and plants falling into the trenches. Some animals in the trenches feed on bacteria coming from vents in the ocean floor. Animals have only recently been discovered here, but some examples of animals that live in or near the trench zone are isopods and snailfish.

Pictures from: https://web.whoi.edu/hades/imagesvideo/

Ocean Zone Notes

Name: _____ Date: _____

Zone: _____
Facts:

-
-
-

Animal Adaptations:

-
-
-

Zone: _____
Facts:

-
-
-

Animal Adaptations:

-
-
-

Zone: _____

Facts:

-
-
-

Animal Adaptations:

-
-
-

Zone: _____

Facts:

-
-
-

Animal Adaptations:

-
-
-

Zone: _____

Facts:

-
-
-

Animal Adaptations:

-
-
-

Ocean Zone Notes

Name: _____Date: _____Class: _____

Zone: _____
Facts:
-
-
-

Animal Adaptations:
-
-
-

Animal Examples:
-
-

Zone: _____
Facts:
-
-
-

Animal Adaptations:
-
-
-

Animal Examples:
-
-

Zone: _____
Facts:
-
-
-

Animal Adaptations:
-
-
-

Animal Examples:
-
-

Zone: _____
Facts:
-
-
-

Animal Adaptations:
-
-
-

Animal Examples:
-
-

Zone: _____
Facts:
-
-
-

Animal Adaptations:
-
-
-

Animal Examples:
-
-

Designing a Marine Creature

Name: _____Date: _____Class: _____

Draw your new marine creature. Give it a name and label or list the adaptations your creature has that help it survive in one of the ocean zones.

Creature name: _____

Adaptations:

This animal has _____, _____, and _____.

These adaptations help the marine creature survive by _____

_____

_____

_____

Ocean Layer and Justification:

This creature lives in the _____ layer or zone. This is the best layer for the animal because _____

_____

_____

ARIZONA GEOGRAPHIC ALLIANCE