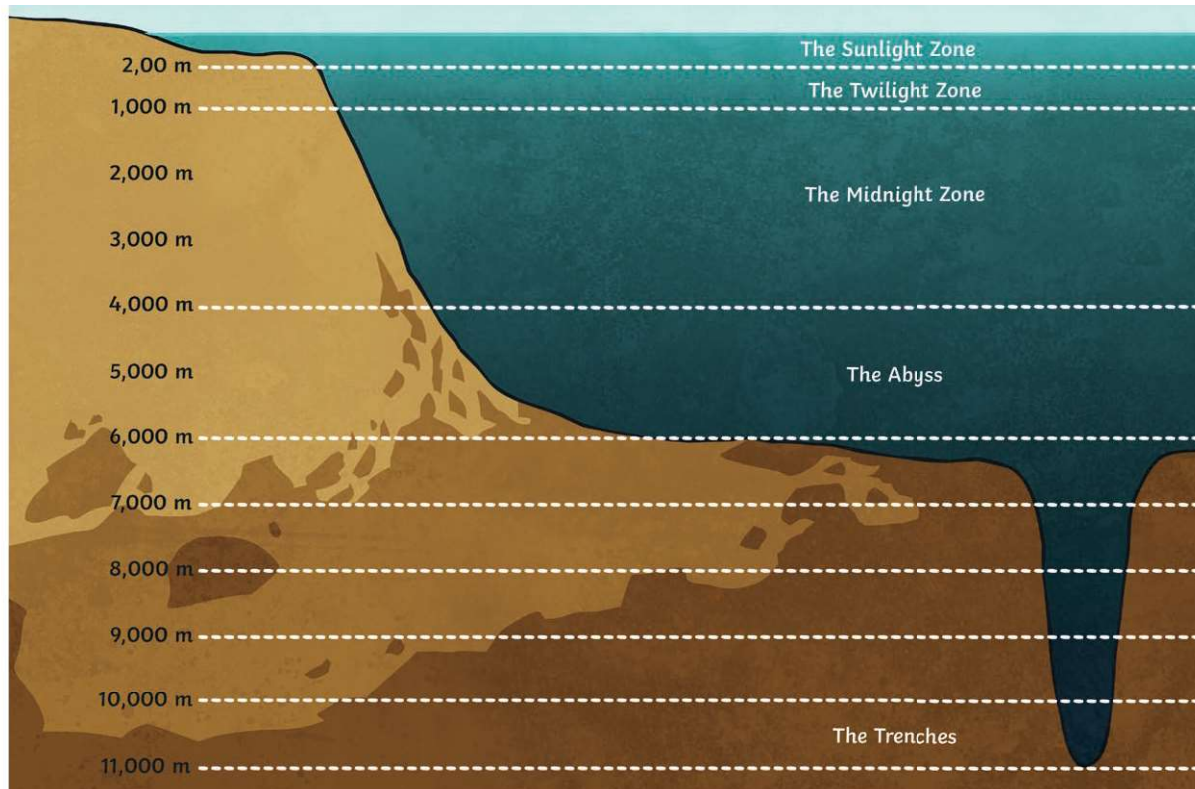


Layers of the Ocean



Oceans cover two-thirds of our Earth and there are five main oceans which all flow into each other: the Arctic Ocean, the Atlantic Ocean, the Indian Ocean, the Pacific Ocean and the Southern or Antarctic Ocean.

What Are the Layers of the Ocean?

Oceans are made of five layers, or depths, which all have different characteristics, such as temperature and amount of light. They have unique creatures living within them.

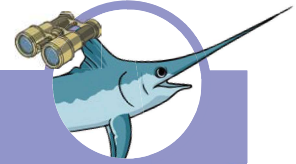


The Sunlight Zone

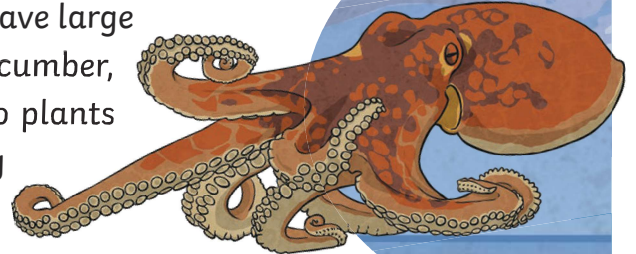
The Sunlight Zone is up to 200m below the surface of the ocean and there is plenty of sunlight and heat in this zone although these both decrease as you go deeper. There are many different living things within this layer, including seaweed, dolphins, fish and coral reefs. Humans enjoy this warm layer for activities such as swimming and fishing.



The Twilight Zone

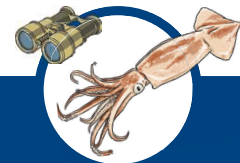


The Twilight Zone is up to 1,000m below the surface of the ocean and only faint sunrays reach this layer, making it very cold. It is home to unique sea animals, which often have large eyes to help them to see, such as the sea cucumber, the swordfish, the wolf eel and the octopus. No plants grow within this layer and humans can only dive to this layer wearing protective suits.



The Midnight Zone

The Midnight Zone is up to 4,000m below the surface of the ocean and it is pitch-black because sunlight cannot reach this far down. Some light can be seen from the creatures that make their own light, such as anglerfish, viperfish and jellyfish. Some creatures, such as the sperm whale, dive to these depths to hunt for food.



Abyss

The Abyss is up to 6,000m below the surface of the ocean so sunlight cannot reach this layer at all. It is pitch-black and near freezing meaning very few creatures live here. Those that do are mainly transparent, blind invertebrates, such as lanternfish, amphipods and squid.

The Trenches

The ocean floor is made up of narrow, underwater trenches. These trenches are up to 11,000m below the surface within the ocean floor. The temperature is near freezing and there is extreme pressure. No natural light exists in this zone but different creatures can be found, such as sea stars.

Did You Know...?

The deepest part of the ocean ever to be explored by humans, using specialist scientific equipment, is the Mariana Trench. It is almost 11,000m deep!

Questions

1. How many main oceans are there? Tick one.

- two
- three
- four
- five

2. Number these ocean layers in order of how deep they are, with 1 being closest to the surface.

- The Midnight Zone
- The Sunlight Zone
- The Trenches
- The Abyss
- The Twilight Zone

3. Which facts are true about the Sunlight Zone? Tick **two**.

- It is up to 1,000m below the surface of the ocean.
- There is plenty of heat.
- Humans enjoy this layer for swimming.
- There are very few creatures living here.

4. Which layer can humans explore wearing a protective suit? Tick one.

- The Sunlight Zone
- The Twilight Zone
- The Midnight Zone
- The Abyss

5. Find and copy a phrase which shows that the Abyss is very dark.

6. What is the name of the deepest part of the ocean explored by humans?

7. Why do some of the creatures in the Midnight Zone make their own light?

8. Why is specialist scientific equipment needed to explore the trenches?
