

Our Blue Planet - Year 4

Key Vocabulary:

Micro plastics are tiny bits of plastic. Often they are too small to be seen.

Pollution is anything that makes the earth dirty and unhealthy. There are many different types of pollution and water pollution is one of them.

Human and physical features are things that you can see all around you. Physical features like seas, mountains and rivers are natural. Human features are things like houses, roads and bridges which are man-made.

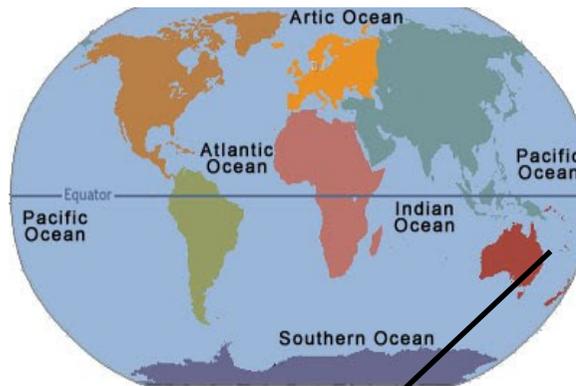
An **ecosystem** is made up of living (plants, animals) and non-living things (rocks, water, soil) in an area.

Coral reefs are underwater structures made up of tiny animals called coral polyps.

The **Equator** is an imaginary line around the centre of the Earth. Dividing it into the North & South Hemispheres.

Photosynthesis is the process in which green plants use sunlight to make their own food.

There are 5 oceans on our planet.



The **Great Barrier Reef** is a site of beauty on the north-east coast of Australia. It contains the world's largest collection of coral reefs, with 400 types of coral and 1,500 species of fish.



Key Questions:

Fun Facts:

What are the layers of the ocean?

The ocean covers 71% of the Earth's surface.

Which plants and animals live in each layer of the ocean?

The Great Barrier Reef is the largest living thing on Earth and is visible from outer space!

What impacts do humans have on the ocean?

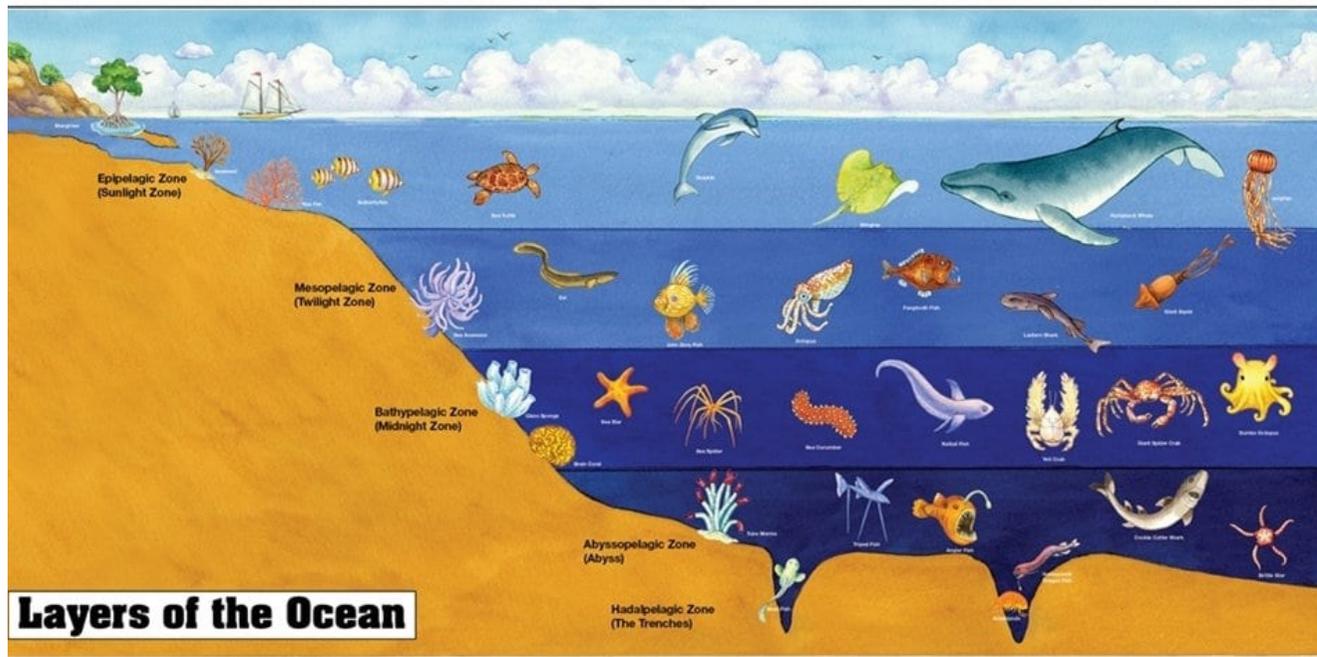
How does tourism affect the environment?

12 million tonnes of plastic finds its way into the ocean every single year.

How do micro-plastics harm animals in the ocean?

The deepest trench in the world, the Mariana Trench (1,580 miles long).

Layers of the ocean:



Impact of tourism on our oceans:

Tourism is when people travel from where they live to another place for pleasure or relaxation. This can be a day trip or a holiday. Eight out of 10 tourists visit coastal areas, adding to the 12 million tonnes of plastic that enter the ocean every year.



Sunlight Zone
0-200m

Twilight Zone
200-1,000m

Midnight Zone
1,000-4,000m

The Abyss
4,000-6,000m

The Trenches
6,000-11,000m

Sunlight zone: This is the uppermost layer of the ocean where photosynthesis can occur.

Twilight zone: Animals such as whales, swordfish, shrimps and octopuses live in these depths. The lower light levels mean that no plants can grow, as photosynthesis can't take place.

Midnight zone: Is pitch-black because sunlight cannot reach this layer. Some light can be seen from creatures that make their own light. Some creatures, such as the sperm whale, dive to these depths to hunt for food.

The Abyss: Deep within the world's seas and oceans is an area called the abyssal zone. It lies more than 6,000 feet (1,800 meters) below the surface of the water. It is totally dark there, and the water is almost motionless. Yet even in these conditions various forms of life survive.

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.