Dive into the Geep!
The Layers of the Ocean

## The Earth's Oceans

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## Did you know...?

Oceans cover 362 million $\mathrm{km}^{2}$ of the Earth's surface - that's more than twice as much ocean as there is land!

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## Did you know...?

The Pacific Ocean is the largest and deepest of all the oceans. It is so deep in places that the world's tallest mountain, Everest, would sink without a trace!


## The United Kingdom

There are five oceans, but they are not separated.
They all flow into each other. Some smaller areas are called a sea.

Oceans should not be confused with seas. Seas are smaller than oceans and are usually located where the land and ocean meet.

Look at this map of the United Kingdom as an example:


## Did you know...?

$97 \%$ of the world's water is in the oceans. Where do you think the other $3 \%$ is?

## Dive into the Deep!

The ocean is deeper in some places than others. We call these different depths, layers. Each layer has it's own characteristics and unique set of animals which live there.

Let's explore the ocean!
Click on a layer to find out more.

Sunlight Zone
Twilight Zone
Midnight Zone

## The Sunlight Zone

- The Sunlight Zone is up to 200 m below the surface of the ocean.
- Sunlight can reach this layer.
- Many plants, such as seaweed live here.
- $90 \%$ of all ocean life is found here.
- The water is warm because of the sun.
- Both humans and fish, play and explore here.


Can you name some of the creatures that live in this layer?


## The Twilight Zone

- The Twilight Zone is up to 1000 m below the surface of the ocean.
- The sunlight cannot reach this layer.
- Creatures that live here often have large eyes to help them see.


Can you spot the octopus?

## The Midnight Zone

- The Midnight Zone is up to 4000 m below the surface of the ocean.
- Sunlight cannot reach this layer, which means it is pitch black.
- $90 \%$ of the ocean is in the Midnight Zone.
- Many creatures produce their own light to help them to hunt their prey.
- Most animals will be black or red because of the lack of light.
- Other creatures dive to these depths to hunt, for example, the sperm whale.


Can you name some of the creatures that live in this layer?


## The Abyss

- The Abyss is up to 6000 m below the surface of the ocean.
- The ocean bed at this level is covered with thick mud, made from the remains of dead animals.
- Water temperatures in this layer are near freezing.
- The sunlight cannot reach this level at all so it is pitch black.
- Very few creatures live here, mainly invertebrates, such as sea stars.
- $75 \%$ of the ocean bed is in this zone.


Can you see the crab?

## The Trench

- The Trench is up to $11,000 \mathrm{~m}$ below the surface of the ocean.
- The Trench is also known as the ocean floor and is a series of underwater canyons.
- This zone can only be explored using specialist scientific equipment.
- The temperature is near freezing.


Did you know...?
The deepest part of the ocean is in the Mariana Trench.
It is almost $11,000 \mathrm{~m}$ deep!


