

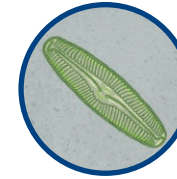
Key Vocabulary

ocean	An ocean is a large, continuous body of salt water. There are five oceans on Earth.
marine	The term ' marine ' refers to anything found in or related to the ocean or sea.
habitat	A habitat is a specific area or environment where particular animals or plants live.
biodiversity	Biodiversity refers to the variety of living things found in a specific area.
plankton	Plankton are tiny organisms that drift in the ocean and are carried by the tide. They are essential to many marine food chains.

Supporting Life

Oceans cover over 70% of Earth's surface and make up about 97% of all Earth's water.

It's estimated that **oceans** provide us with over 50% of the world's oxygen, most of which is produced by **plankton**.



Oceans absorb about 25% of human-made carbon dioxide, removing it from the atmosphere and lowering levels of greenhouse gases.

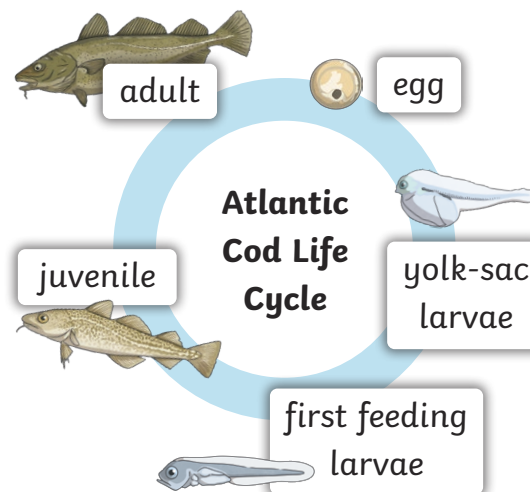
Oceans are a source of renewable energy and help regulate Earth's weather and climate. They absorb heat, distribute it through currents and play a key role in the water cycle.

Oceans provide food and jobs for billions of people worldwide through the fishing industry. They are also important for global tourism and leisure activities.



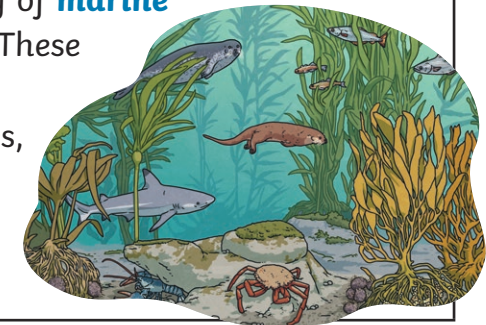
Ocean Life Cycles

Every organism in the **ocean** experiences a unique life cycle, involving birth, growth and reproduction. Understanding these life cycles is important for protecting species that may be at risk of extinction and making decisions about fishing and **conservation**.



Biodiversity

The **ocean** is the largest ecosystem on Earth and incredibly rich in **biodiversity**. An incredible variety of **marine** organisms are adapted to life there. These organisms live in a wide range of **habitats**, including deep-sea trenches, mangrove forests, kelp forests, coral reefs, the open ocean, polar seas and the shores of intertidal zones.



Key Vocabulary

climate change	Climate change is the long-term change in temperature and weather patterns in a particular area or across the planet.
global warming	Global warming is the gradual increase in the overall temperature of Earth.
conservation	Conservation is the protection and preservation of living things and their natural environments.
pollution	Pollution is the introduction of harmful materials into the environment.
sustainable	If something is sustainable , it uses natural resources in a way that causes little or no harm to the environment, now or in the future.

Sustainable Fishing

Fishing is an important source of income for many; however, when not done **sustainably**, it can harm the environment.

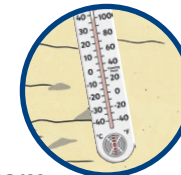


Overfishing occurs when too many fish of a species are caught, leading to population decline. Some fishing methods cause bycatch or habitat damage. **Marine** Protected Areas (MPAs) and regulations such as catch quotas help promote sustainable fishing.

Threats to Our Oceans

Human activity is rapidly changing our **oceans** and threatening **marine** life. Many of these changes result from **global warming**, driven by human activities such as burning fossil fuels.

rising sea levels – Melting glaciers and thermal expansion are causing sea levels to rise.



temperature – **Oceans** are absorbing more heat from the atmosphere, resulting in a rise in global average sea surface temperatures. Many **marine** species are sensitive to temperature changes.

coral bleaching – Rising **ocean** temperatures can stress corals, causing them to expel their symbiotic algae. This leaves corals without their vibrant colour and an important source of nutrients, which can damage the reef.



acidification – **Oceans** remove carbon dioxide from the atmosphere, making the **ocean** water more acidic. This can damage the shells and skeletons of **marine** animals such as **plankton**, molluscs, coral and shellfish.

pollution – Plastics, metals, sewage and pesticides **pollute** coastal waters, harming **marine** life.

