All About Ocean Life

Rachel Bladon

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Introduction

A lot of Earth is covered by saltwater oceans. The oceans are home to many types of life, from the smallest plants to the biggest whales.

Earth

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The CD has a choice of American and British English recordings of the complete text.

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Printed in China.
Oceans of the World

There are five oceans, and they cover about 70 percent (%) of Earth. Oceans and their seashores are different all around the world. On the Arctic Ocean and the Southern Ocean there’s a lot of ice in winter. In warm tropical oceans you can find colorful coral reefs, where very many plants, fish, and other animals live.

An ocean is always moving because of waves, currents, and tides. When the wind blows over the water, it makes waves. Currents are large amounts of warm or cold water that move around the ocean. An ocean also moves up the seashore and back again two times a day. These movements are called tides.

Living in the ocean is very different to living on land. Ocean plants and animals have special ways of breathing, eating, moving, and keeping safe.

The blue whale is the biggest animal in the world. It can be more than 30 meters long! It moves well in the ocean because the water holds it up.
Who Eats What?

In the ocean there are lots of very small animals and plants called plankton. The plankton live near the top of the ocean because they need sunlight. Small fish eat plankton. Big animals eat the small fish. Then even bigger animals eat them! So plankton are important for almost every ocean animal. This is called a food chain.

Animals that eat other animals are called predators. The animals that they eat are called prey. Most sharks are predators. Sharks can swim very fast to catch their prey.

The whale shark is the biggest fish in the world. It's as long as a bus. It has no teeth, so it only eats plankton and small shrimps.

Lots of seaweed called kelp grows near the seashore. The kelp is a safe home for many fish. Sea urchins eat kelp, and sea otters eat a lot of sea urchins. So sea otters help to keep enough kelp in the ocean for the fish to live in.
The Seashore

There’s a lot of ocean life near the seashore because the water here is full of food. Many birds, fish, and shellfish live and feed near the seashore. The seashore is not always a safe place. Big waves can throw animals onto rocks or carry them away. At low tide, animals and plants can easily dry out in the sun.

Limpets are animals that have a special strong foot that holds onto rocks. This keeps them safe from big waves. They also have a hard shell so they don’t dry out.

Most trees can’t live in salty ocean water, but mangrove trees grow on the seashore in tropical places. They have special roots so they can live in salt water. Many fish and other animals live under the roots of mangrove trees.

Under the water, sea anemones use their long tentacles to catch food and to sting their predators. At low tide, they pull their tentacles in so they don’t dry out.
Mammals and Birds

A mammal is an animal that drinks milk from its mother and breathes air. Most mammals, like people and elephants, live on land. Some mammals live in the ocean. Because they feed and move in water, ocean mammals are different from land mammals in many ways.

The sea lion’s body has a shape like a fish, so it can swim very fast. It doesn’t have front legs, but it has flippers that pull it through the water.

Whales are ocean mammals. Like all whales, the sperm whale breathes through a hole on its head called a blowhole. Sperm whales can stay underwater for two hours, and they can dive a long way down into the ocean.

Some birds live, feed, and sleep on the ocean. They catch fish by diving under the water. Some birds only come to the seashore to make nests and to lay eggs.

Discover!
The albatross has bigger wings than any other bird. The two wings can be more than 3 meters wide! The albatross can fly up to 1,000 kilometers a day.
Corals are small animals that make hard covers around themselves. The covers are many different shapes and colors. Coral reefs are places where lots of corals live together. They are beautiful underwater worlds.

Many different plants and animals live on coral reefs. Coral reef fish are very colorful so they are camouflaged – it’s not easy to see them near the coral.

Clownfish live near the tentacles of sea anemones. Predators don’t come near because the tentacles can sting them. The clownfish are safe because they have a special skin. Predators don’t come near lionfish either. The spines of a lionfish can sting a fish and stop it moving, or even kill it.

Small fish called cleaner wrasse work hard on coral reefs. They eat the little plants and animals that live on big fish. Big fish don’t eat the cleaner wrasse. They open their mouths so the wrasse can clean inside!

Go to pages 32–33 for activities.
Keeping Safe

Small fish and other animals have to keep safe from predators. Some fish swim together in big groups called shoals. In a shoal, there are more fish to look out for predators. There are also lots of fish to eat. So if a fish is lucky, the predator eats one of the other fish!

The leafy sea dragon is very well camouflaged. When it hides in seaweed, other fish can't see it. Can you see this leafy sea dragon?

Octopuses camouflage themselves by turning a different color. Can you see this octopus? When an octopus is scared, it can also make a big cloud of black ink. This surprises predators and gives the octopus time to swim away.

When the porcupine fish sees a predator, it drinks lots of water. This makes its body big and round like a ball, and its spines stand up. Predators know that they can't eat it so they don't come near.

If a starfish loses an arm, it can grow a new one.
Catching Prey

A Hammerhead Shark

Big predators are very good at catching their prey. Sharks can smell and see very well. The hammerhead shark has nostrils and eyes at the ends of its head, so it can see and smell all around.

The electric ray can give other fish an electric shock. This stops them moving, or kills them, so that the ray can eat them.

All jellyfish have tentacles that can sting. When a fish swims near a jellyfish, the tentacles sting it many times. The jellyfish can then eat the fish.

The angler fish lives in deep water, where it’s very dark and cold, but it has a small light on its head. When small fish see the light, they think it’s something that they can eat. When they swim near, the angler fish eats them.

Electric rays make electricity. Some make enough electricity to work a television!

Go to pages 36–37 for activities.
Icy Oceans

Large parts of the Arctic Ocean and Southern Ocean have ice on them in winter. There are also big icebergs. In summer, a lot of the ice melts. Then there are little pieces of ice in the oceans, and the icebergs are smaller.

Polar bears live in the Arctic. Most of the year, they live on ice. They catch seals from holes in the ice. They also swim between the ice and icebergs. Polar bears are the biggest type of bear, but their cubs are very, very small when they are born.

In summer, the Southern Ocean has a lot of plankton. Many dolphins, whales, seals, and birds come there to feed.

Penguins live near the South Pole. They dive into the ocean for fish and other small animals. They have special feathers that keep them warm and dry. Their feathers are so warm that penguins can sometimes get too hot!

Discover!
A penguin keeps its egg on its feet so it doesn’t get cold on the ice.
Farming the Oceans

People started fishing a long time ago, but today, fishermen with big boats can catch a lot of fish. Sometimes we take too many fish from the ocean.

In many parts of the world, people farm fish in the ocean. The fish grow quickly, and they are also easy to catch.

There are other types of farm in the ocean. In some places, farmers grow seaweed. When the seaweed is big enough, farmers collect it and dry it on land. Then they sell it. People eat it, and other farmers put it on their fields.

Discover!
People use seaweed to make ice cream!

In the Pacific Ocean, farmers grow pearls. They put pieces of shell inside shellfish called oysters and then they put the oysters on ropes. Hard shiny covers called pearls grow around the shell pieces. Farmers sell pearls for a lot of money.
10 Oceans in Danger

There are many dangers for ocean birds and other animals. Big boats carry oil across the oceans. If the oil goes into the water, birds and other animals eat it. It also gets on their skin or feathers. It can kill them.

Dirty water and chemicals from toilets, factories, and farms also go into the oceans. They can kill plants, fish, and other animals. People leave things on the beach, too, and sometimes these things can hurt animals. Sea turtles eat plastic bags because when they are in the water they look like jellyfish.

Sometimes, big fishing nets catch dolphins, sea turtles, seals, and birds. Coral reefs are not safe either because they need clean water. Boats can break them, too.

So now we need to keep the ocean clean and safe. There are new rules so people can’t take too many fish from the ocean. There are also new types of fishing net. Big animals can swim out of these nets. Now there are also some marine parks – special places where the ocean is always clean and safe.
1. Write the oceans.

Arctic Atlantic Indian Pacific Southern

1 Arctic Ocean 4
2 5
3

2. Complete the sentences.

1 There are five oceans.
2 The oceans cover about ______% of Earth.
3 There are ______ high and low tides every day.
4 The blue whale can be more than ______ meters long.
5 Earth has ______ Poles.

3. Circle the correct words.

1 A lot of Earth is covered by land / ocean.
2 In the Pacific / Arctic Ocean there is ice in winter.
3 Tropical oceans are colder / warmer than the Arctic.
4 In tropical oceans you can find colorful ice / coral reefs.
5 When the wind blows over the water, it makes tides / waves.
6 The blue whale is the smallest / biggest animal in the world.
7 The air / water holds up the blue whale.

4. Complete the puzzle.

1 the biggest animal in the world
2 the ocean around the North Pole
3 the ocean around the South Pole
4 large amounts of warm or cold water that move around the ocean
5 the movements of the ocean going up and down the seashore
2 Who Eats What?

1 Write the words.

animal plankton  great white shark
small fish   plant plankton   dolphin

2 Match. Then write sentences.

Dolphins eat
Great white sharks eat
Whale sharks eat
Sea otters eat

dolphins.
sea urchins.
small fish.
plankton.

3 Answer the questions.

1 What are plankton?
   They are very small animals and plants.

2 Why do they live near the top of the ocean?

3 What is a predator?

4 What is the biggest fish in the world?

5 What is kelp?

4 Draw and write about a food chain.

Dolphins eat small fish.

1

2

3

4
3 The Seashore

1 Write the words.

1 ____________________
2 ____________________
3 ____________________
4 ____________________

2 Complete the sentences.

mangrove trees shellfish
sea anemones limpets
tentacles salt animals dry out
rocks low tide shell seashore

1 Many _______ live near the _______ because the water is full of food.
2 Animals and plants can dry out at _______.
3 Limpets hold onto _______ with a special strong foot.
4 Limpets have a hard _______ so they don’t dry out.
5 Mangrove trees have special roots so they can live in _______ water.
6 Sea anemones pull their _______ in so they don’t _______.

3 Complete the chart.

- sea anemones sharks animal plankton
- kelp limpets sea urchins mangrove trees
- plant plankton shrimps sea otters whales

<table>
<thead>
<tr>
<th>Ocean Animals</th>
<th>Ocean Plants</th>
</tr>
</thead>
<tbody>
<tr>
<td>sea anemones</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4 What is it? Write the answers.

- a limpet a sea anemone a shark
- a mangrove tree plankton

1 It has a strong foot and a hard shell. _______
2 It has long tentacles for catching food. _______
3 Many fish and other animals live under its special roots. _______
4 It can swim very fast. _______
5 They are very small animals and plants. _______
4 Mammals and Birds

⇒ Read pages 10–11.

1 Circle the correct words.
   1 A mammal drinks water / milk from its mother.
   2 The sea lion has front legs / flippers.
   3 The sperm whale breathes through its mouth / blowhole.
   4 It can stay underwater for two hours / twenty minutes.
   5 Some ocean birds only come to the seashore to lay nests / eggs.
   6 The albatross has bigger wings / a longer tail than any other bird.

2 Complete the diagram.
   albatross  sea lion  sperm whale
   blue whale  shark  dolphin

3 Write about another ocean animal.

<table>
<thead>
<tr>
<th>Name:</th>
<th>dolphin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mammal, fish or bird?</td>
<td>mammal</td>
</tr>
<tr>
<td>Eats:</td>
<td>fish and squid</td>
</tr>
<tr>
<td>Lives:</td>
<td>all over the world</td>
</tr>
<tr>
<td>Description:</td>
<td>gray color it has a fish shape</td>
</tr>
<tr>
<td>Interesting facts:</td>
<td>it can see and hear very well it makes loud noises to help it move around safely</td>
</tr>
</tbody>
</table>
5 Coral Reefs

Read pages 12–13.

1 Write the words.
   cleaner wrasse  sea anemone  sea urchin  shark  lionfish  clownfish
   1 ____________________
   2 ____________________
   3 ____________________
   4 ____________________
   5 ____________________
   6 ____________________

2 Match.

1 They are small animals with hard covers.
2 They sting predators with their tentacles.
3 They live near the tentacles of sea anemones.
4 They have spines that can sting.
5 They clean other fish.

3 Write true or false.
   1 Corals are all the same shape.  ________
   2 There are not many plants or animals on coral reefs.  ________
   3 It is hard to see animals that are camouflaged.  ________
   4 Clownfish live near the tentacles of sea anemones to keep safe from predators.  ________
   5 Lionfish have tentacles that sting fish.  ________
   6 Fish eat cleaner wrasse when they are cleaning their mouths.  ________

4 Complete the sentences.
   skin  kill  mouths  camouflaged  colors

   1 Corals have covers that are many different shapes and ________.
   2 Coral reef fish are very colorful so they are well ________.
   3 Sea anemones don’t sting clownfish because they have a special ________.
   4 If a lionfish stings a fish it can ________ it.
   5 Fish open their ________ when cleaner wrasse clean inside.
Keeping Safe

1 Write the words.

- leafy sea dragon
- porcupine fish
- octopus
- starfish
- shoal of fish
- seaweed

Choose the words to match.

1 ______ 2 ______ 3 ______

4 ______ 5 ______ 6 ______

2 Match.

To keep safe...

- It grows a new arm.
- It turns a different shape so that nothing can eat it.
- It makes a cloud of black ink.
- It hides in seaweed.
- They swim together in big groups.
- It turns a different color.

3 Answer the questions.

1 What are big groups of fish called?

2 What does the leafy sea dragon look like?

3 How do octopuses camouflage themselves?

4 What do octopuses do when they are scared?

5 What does the porcupine fish do when it sees a predator?

6 What happens to a porcupine fish’s body?

4 Draw and write about an ocean animal.

This ocean animal is called ______

When it sees a predator, it ______

It does this to ______.
7 Catching Prey

Read pages 16–17.

1 Write the words.

1 ______ 4 ______ 7 ______
2 ______ 5 ______ 8 ______
3 ______ 6 ______ 9 ______

2 Circle the correct words.

1 The animals that big animals eat are called their prey / predators.
2 The hammerhead shark has nostrils and eyes at the ends of its head / body.
3 Some electric rays make enough electricity to work a television / train.
4 The jellyfish catches its prey with tentacles / spines.
5 The angler fish lives in warm / dark water.
6 The angler fish has a light on its head / teeth.

3 Complete the sentences. Then match.

<table>
<thead>
<tr>
<th>stings</th>
<th>smell</th>
<th>light</th>
<th>shock</th>
</tr>
</thead>
<tbody>
<tr>
<td>_______</td>
<td>_______</td>
<td>_______</td>
<td>_______</td>
</tr>
</tbody>
</table>

1 It gives fish an electric _______.
2 It can see and _______ all around.
3 It _______ fish with its tentacles.
4 It has a _______ on its head so other fish swim near.

4 Draw and write about two ocean predators.

This ocean predator is called _____________.

It is special because

_______________________.

To catch prey, it _______.

_______________________.
_______________________.
_______________________.
_______________________.
_______________________.

3 Write about polar bears and penguins.

Three things I read about polar bears on page 18:

1. ________
2. ________
3. ________

Another thing I know about polar bears:

________

Three things I read about penguins on page 19:

1. ________
2. ________
3. ________

Another thing I know about penguins:

________

1 Find and write the animals.

<table>
<thead>
<tr>
<th>polar bear</th>
<th>1 bird</th>
</tr>
</thead>
<tbody>
<tr>
<td>efdehidwg</td>
<td>2</td>
</tr>
<tr>
<td>nfkojrlzr</td>
<td>3</td>
</tr>
<tr>
<td>gsealdica</td>
<td>4</td>
</tr>
<tr>
<td>uaeoypwel</td>
<td>5</td>
</tr>
<tr>
<td>ijduihpg</td>
<td>6</td>
</tr>
<tr>
<td>naeekoaih</td>
<td></td>
</tr>
<tr>
<td>csbaumlnv</td>
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<tr>
<td>bntaiiexq</td>
<td></td>
</tr>
</tbody>
</table>

2 Circle the correct words.

1. There is a lot of / not much ice on the Arctic and Southern Oceans in winter.
2. The icebergs are smaller in summer / winter.
3. Polar bears are the biggest / smallest type of bear, but their cubs are very big / small.
4. Many animals come to the Southern Ocean in summer because there is a lot of ice / food.
5. Penguins live near the South / North Pole.
6. A penguin keeps its egg on its feet / feathers.
9 Farming the Oceans

1 Complete the puzzle.

1 Fishermen with big boats catch a lot of these.
2 Farmers can sell these for a lot of money.
3 This is cold and can have seaweed in it.
4 Some farmers put this on their fields.
5 Farmers put these on ropes.

2 Write true or false.

1 Today, people do not catch a lot of fish in the ocean.
2 It is easy to catch fish in ocean farms.
3 Fish in ocean farms grow very slowly.
4 You can’t eat seaweed.
5 Pearls start as pieces of shell.
6 People buy pearls for a lot of money.

3 Complete the sentences. Then match.

<table>
<thead>
<tr>
<th>shell</th>
<th>pearls</th>
<th>money</th>
<th>oysters</th>
<th>ropes</th>
</tr>
</thead>
</table>

1 The farmer collects **oysters**.
2 The farmer puts pieces of _____ inside.
3 The farmer puts the oysters on _____.
4 _____ grow.
5 The farmer sells the pearls for a lot of _____.

<table>
<thead>
<tr>
<th>collects</th>
<th>put</th>
<th>sells</th>
<th>dries</th>
<th>grows</th>
</tr>
</thead>
</table>

6 The seaweed _____ in the ocean.
7 The farmer _____ the seaweed.
8 The farmer _____ the seaweed on land.
9 Then the farmer _____ it.
10 Other farmers _____ seaweed on their fields.
10 Oceans in Danger

Read pages 22–23.

1 Complete the sentences.

marine parks plastic bags oil fishing nets chemicals

1 Sometimes _________ from big boats goes into the ocean.

2 Dirty water and _________ from toilets, factories, and farms go into the ocean.

3 Sea turtles think _________ are jellyfish.

4 Sometimes fishermen catch dolphins, sea turtles, seals, and birds in their _________.

5 _________ are special places where the ocean is always clean and safe.

2 Answer the questions.

1 Why is oil a problem?

2 Why are plastic bags dangerous?

3 What is the problem with big fishing nets?

3 Complete the chart.

- boats break coral reefs
- dirty water and chemicals
- big nets catch animals
- fishermen take too many fish
- people leave things on beaches
- oil

<table>
<thead>
<tr>
<th></th>
<th>Pollution</th>
<th>Fishing</th>
<th>Damage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cod</td>
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<td></td>
<td></td>
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<tr>
<td>Whales</td>
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<tr>
<td>Dolphins</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Turtles</td>
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</table>

4 Write the solutions.

1 Problem: Big boats catch a lot of fish.
   Solution: There are new rules so people can't take too many fish from the ocean.

2 Problem: Big fishing nets catch dolphins, sea turtles, seals, and birds.
   Solution: 

3 Problem: Dirty water, oil, and chemicals go into the ocean.
   Solution: 

1. Think of some dangers for ocean life in or near your country. Write notes.

<table>
<thead>
<tr>
<th>What's the danger?</th>
<th>What happens?</th>
<th>What can we do?</th>
</tr>
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<tbody>
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2. Make a poster. Write about oceans in danger and add pictures.
3. Display your poster.

---

1. Write the names of ocean life in or near your country.

<table>
<thead>
<tr>
<th>Mammals</th>
<th>Birds</th>
<th>Fish</th>
<th>Other Animals</th>
</tr>
</thead>
<tbody>
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</table>

2. Write the names of four animals to make a food chain.

2. Make a food chain poster. Draw pictures and write about your food chain.
4. Display your food chain poster.