

Chapter 11

Under the Sea

The sea and its mysteries have interested man down the ages. It has many moods and many colours. One day it is clam and placid, a deep soothing blue, the next day a raging devil, dark and grey, tossed high by driving winds.

Three-quarters of the earth's surface is covered by oceans and only a fourth by land. The five great oceans of the world extend to millions of square kilometres. However, these vast expanses of water are not a lifeless waste. They are teeming with life and a varied landscape lies below. These oceans are the world's biggest habitat and home to thousands of plants and animals.

What is there under the sea ? There is land, just as there is land beneath a lake or a river. This is called the sea-bed. In some parts the sea-bed has deep valleys, in others it rises up into underwater mountains. Sometimes these mountains chains rise above the level of the water. This is what forms islands. As a matter of fact, one of the Hawaiian islands is a mountain 31,000 feet high. It is even higher than Mount Everest!



The average depth of the water in the world's oceans is 12,000 feet. The deepest is the Marianas Trench, off the Philippine Islands in the South Pacific Ocean. Here the sea floor lies approximately 36,000 feet under the sea. So the distance to the surface of the ocean is again more than the height of Mount Everest.

Another feature of the oceanic landscape is the coral reef. Coral reefs are formed when tiny marine animals called polyps attach themselves to rocks on the sea-bed. The reef is made up of skeletons of old polyps and the new living polyps.

Teacher's Note: Encourage the pupils to read more and more of Aesop fables.

Coral reefs are only a small part of the ocean habitat, but they contain about the third of all the world's species of fish. The largest coral reef in the world is the Great Barrier Reef off the north east coast of Australia. This reef is so large that it can even be seen from the moon! The Great Barrier Reef is one of the most colourful regions of the world, sheltering the largest variety of living creatures.

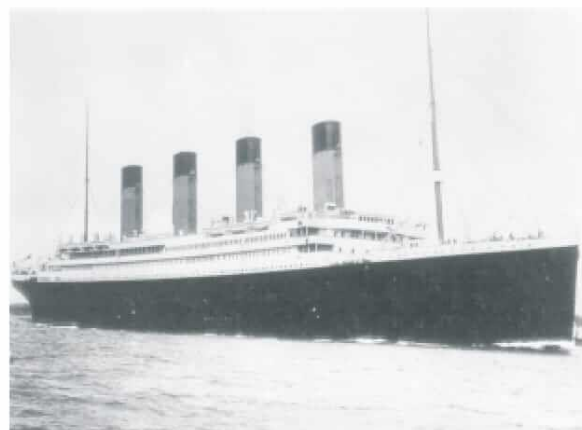


However, the coral used as a semi-precious stone does not come from the Great Barrier Reef. This orange-hued coral is found in the Mediterranean Sea off the coasts of Africa and Italy.



Besides the millions of species of fish and marine vegetation, the sea offers us a wide variety of treasures. Important amongst these are oil and natural gas. With the demand for energy and fuel rising by leaps and bounds we need to tap new sources. A large amount of oil and natural gas is under the sea-bed. We are tapping this source in India, where an off shore oil drilling rig has been set up off the coast of Mumbai in the Arabian Sea.

The sea also hides gems and precious stones. Pearls are found in marine creatures called molluscs, which include squids, clams and oysters. Besides pearls, other precious and semi-precious stones are found in the rocks on the sea-bed.



My man-made treasures are also buried under the sea. Think of all the ships drowned down the ages! During violent storms many ships sank, along with their cargoes of gold, silver and precious stones.

There is the story of the famous ship that was thought to be unsinkable. The 270-metre long passenger liner, the Titanic, was on her maiden voyage with more than 2000 people on board. One night, in April 1912, she struck an iceberg in the North Atlantic Ocean and sank, taking the lives of nearly 1500 people. She was found only in 1985 but she still lies on the ocean floor, though many attempts have been made to raise the Titanic.

News update...

Scientists have now discovered that the Titanic did not sink because of one gigantic gash, but a series of six slits on the ship's hull.

The sea can be man's best friend, providing him with food, fuel and other treasures; but it can also be man's worst enemy. It has swallowed innumerable ocean-going vessels and lives into its hungry depths.

From early times man has tried to conquer the ocean and explore the sea-bed. Many lives and much equipment have been sacrificed, but much progress is also being made. Today we have very sophisticated equipment to help us study the life on the ocean-bed.

Scientists have even lowered a submarine to the bottom of the Marianas Trench to study the life forms there. This was indeed a rare

feat, as the water pressure at that depth is so great that any vessel tends to get compressed to half its size! What is even more amazing is the fact that they have discovered tiny organisms living in those conditions, inspite of the enormous water pressure!

The sea has been fascinating man from the time immemorial and it will continue to enthrall him for years to come.



Words to Learn

mysteries	placid	expanses	teeming	varied
reef	to tap	iceberg	attempts	submarine
rate	feat	compressed	explore	sacrificed
sophisticated	immemorial			

Skill Test

WORK OUT

A. Answer the following questions :

1. What does the land under the sea look like ?
.....
2. How are coral reefs formed ?
.....
3. What is the largest coral reef called and where is it ?
.....
4. Why is it difficult to study the sea-bed at the Marianas Trench ?
.....
5. What have scientists found at the bottom of this trench ?
.....

GRAMMAR

A. Fill in the blanks with the correct forms of the verbs in brackets. One is done for you :

1. What a nice ring! Where you
..... (buy) it ?
2. She (see) me but she
(not/speak) to me.
3. Many man-made treasures (lie)
buried under the sea.
4. We (wait) a long time for him but he (not come).
5. It was stupid of you to hide my book. Why you (do) it ?
6. Here the sea-floor (lie) many feet below the sea.
7. The coral used as a semi-precious stone (not come) from Australia.

B. Complete the table as in the example :

positive	negative	contraction
is	is not	isn't
are	.....	.....
.....	was not	.....
.....	will not	.....
can	.....	.....
could	.....	.....
must	.....	.....
.....	.....	wouldn't
.....	.....	shouldn't
do	.....	.....
.....	.....	needn't
.....	.....	didn't

VOCABULARY**A. Write the synonyms :**

soothing

waste

story

attempt

devil

man-made

voyage

enemy

B. There are storms at sea and storms on land. Which ones take place in sea and which ones on land ? In the cloud given below are some words which have nothing to do with storms. Cross out these words. Put the others in the correct column :

flash flood tempest typhoon snowstorm torpedo tornado
hurricane whirlpool hailstorm frost sandstorm cyclone

storms at sea

.....

.....

.....

.....

storms on land

.....

.....

.....

.....

COMPOSITION

Look at the picture given below and describe the scene in your own words :



TIWARI
ACADEMY