

THE FUNCTIONS OF THE SEA



INTRODUCTION

If you see a picture of the earth taken from a spaceship, you will discover its beautiful blue colour. This beauty of our earth graced by the presence of water is what gives it other name, the "**water planet**."

Among the other planets in the solar system, as far as we know, the earth is the only one with oceans.

The term sea refers to certain large bodies of water, but there is inconsistency as to its precise definition and application. Colloquially, the term is used as a synonym for ocean.

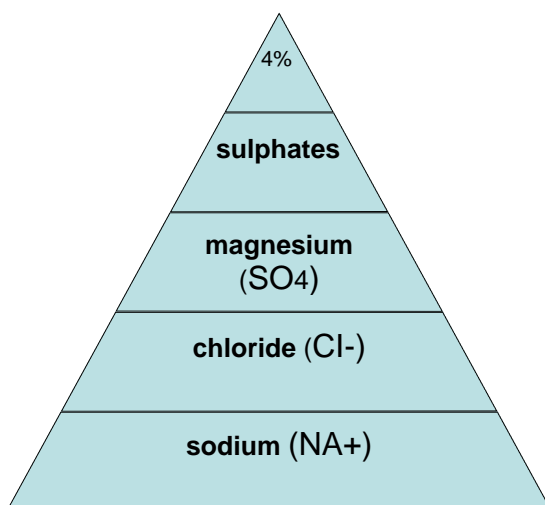
In biology, the term **sea** describes a large expanse of saline water connected with an ocean

THE SEA

Seawater's constituents

Most of seawater's constituents are **inorganic ions** (ions necessary for vital cellular activity).

These four ions comprise almost 96% of the weight of ions present.



The ocean is alive

The sea appeared on earth soon after the earth was created, and from it came the first signs of life. Human beings and other living things can all be traced back to the sea, meaning that it was our "first home." Even now, no matter how advanced our society becomes, all living things on earth, including us human beings, could not exist without the sea. Humans and other creatures that live in the same area maintain a very close, interrelated balance with each other. The ocean is part of this balance, and it is easily affected (influenced) by any changes.

When people catch too many fish, this balance is destroyed, and it damages (harms) the ocean's health.

Purposes of the sea

The sea has many purposes (aims) such as supplying food, energy and various resources.

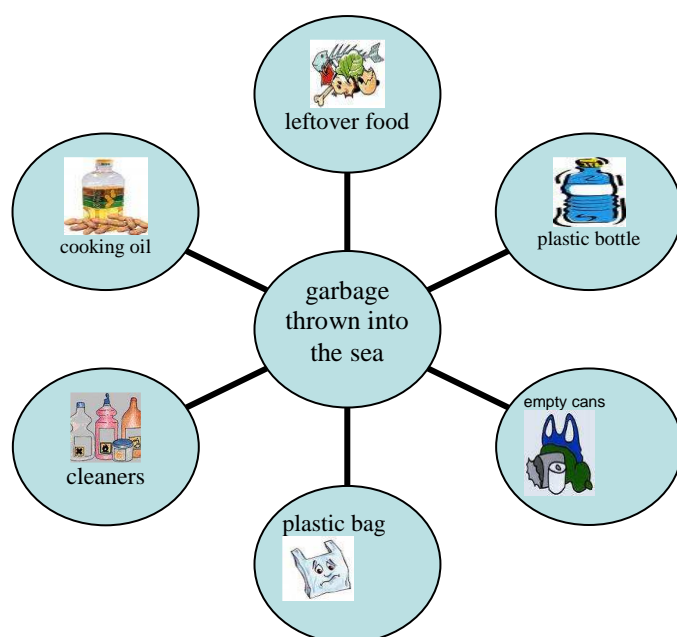
It is also used to transport people and goods.

Finally, it helps balance the climate of the entire world and releases oxygen into the atmosphere.

A GIANT GARBAGE DUMP

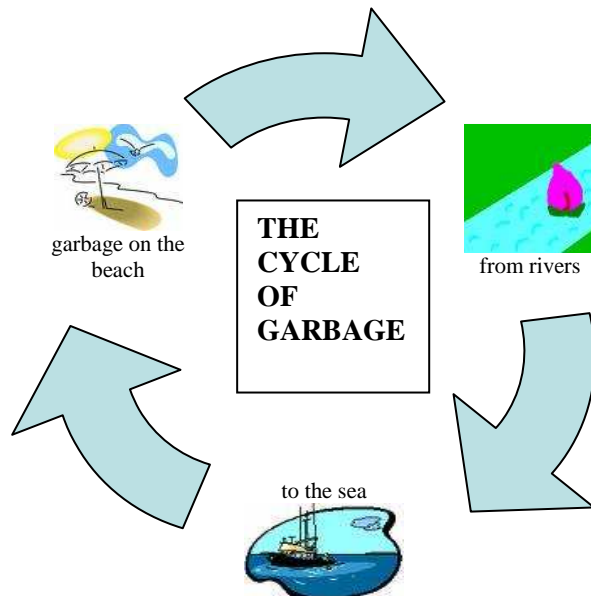
What is the largest **garbage dump** (place for rubbish) in the world? Sadly, the answer is "the sea!" About 3.5 billion (one thousand million) years ago the first life on Earth emerged from the ocean. So, it makes sense to think of the sea as our home.

But, now the sea, our precious home, is a garbage dump.



The cycle of garbage

The garbage found on the beach comes from everyone, everywhere.





GOOD ATTITUDE TO RESPECT ENVIRONMENT

WHAT TO DO	WHAT NOT TO DO	POSITIVE /NEGATIVE EFFECTS
Bring your trash back home	Throw away used cans	Seabirds live/suffer
Pick up trash	Throw away snack wrapped	Fish live/suffer

Wastewater in our house

Without our knowing it, **wastewater** (water mixed with waste matter) from households (family) is contaminating the rivers and oceans.

WASTEWATER in our houses	WHERE	HOW
	In the kitchen	By washing vegetables By washing dishes
	In the bathroom	By washing our bodies By washing our hair By flushing the toilet

Self-cleaning

Usually, rivers and seas can become clean by themselves if the **contamination** is not too severe. Today though, with so many people dumping various wastes into drains and other waterways, this kind of "**self-cleaning**" is getting more and more difficult. As a result, river and ocean pollution is becoming a serious issue.

Let's protect our rivers and oceans!

Sustainable fish catch

Do you know about any of the plans or activities that protect our precious seas?

First of all, setting a limit on **fish catches** and staying within that limit is one solution against **overfishing** (catching fish faster than they can reproduce). The fish population will naturally increase year to year as long as we don't catch more fish than can be replaced naturally, so we can continue fishing forever. The amount which is set for this limit is called a "**sustainable**" fish catch. The word "sustainable" means it can continue forever.

In order for fishing limits to work, it is necessary for countries, especially those around a common sea, to cooperate in protecting fish.

THE LAW OF THE SEA

The United Nations Convention on the Law of the Sea, or simply called "the Law of the Sea," is an international agreement about the rules governing the sea. It has many important laws designed to **protect the sea** and to **prevent pollution**.

Keep in mind!

It's important to be careful not to pour water with waste in it into **drains** (water tubes). We should keep in mind that even though we can't see it, oil and detergent poured (put) into kitchen sinks travel through rivers and flow into the sea. Therefore, before throwing **garbage** into rivers or the sea, or before pouring waste liquids into the sinks, just think about the invisible effects.

The most important thing is how we think and act as individuals. After reading this text, you will know the functions of the sea and its importance. Maybe it will make you think, "We are so lucky to have the sea!" "It's a terrible waste to pollute the sea!" and "How can we save the sea?"

Please think of one or two things you can do to help the sea. Then it is up to you to bring your ideas to life. Without action, your good ideas can't take effect.

Revision corner

