

CHAPTER 8

In the past three chapters, you have explored six biomes that exist on land. Now you are going to study a biome that is underwater!

Out of all the resources that are on our planet, **water** is the most important of them all! From grasslands to deserts, it is the amount of **water** that affects plant and animal life the most!

Without this resource, we would not be able to survive!



The **aquatic biome** can be split in two different groups:

Freshwater (ponds, streams, lakes and rivers)

and

Marine (saltwater - like the ocean!)

Let's take a look at freshwater habitats...

Freshwater habitats include ponds, streams, lakes, rivers and wetlands. These areas are called "freshwater" because of the low amount of salt in the water.

Lakes and **ponds** are bodies of water completely surrounded by land. What makes these two freshwater habitats different is size. Lakes are large areas of water and can exist for hundreds of years. Ponds are much smaller, and can dry up much earlier.

Lakes and ponds are home to many kinds of organisms. Most plants that live in lakes and ponds need large amounts of water to stay alive. These kinds of plants, like cattails, can be found on the banks of a lake or pond. A kind of tree you can find in this area is known as the willow tree.

Also, some plants in these areas must grow **inside** the lake or pond in order to stay alive! Lilly pads are a good example of plants that grow inside a lake or pond.



The animals that live in these areas spend a great deal of time inside of the water. These animals include fish, frogs and many insects. Reptiles and amphibians can also be found in these areas as well! You can usually find lots of animals that live near a large source of water. Since water is a resource that all animals need to survive, a pond or lake is a good place to live!

Lakes and ponds are almost always deeper than another body of water... **wetlands**.

Wetlands are large areas of shallow water, like swamps. There are many different animals that live in a wetland:

Alligators
Ducks
Snakes
Turtles



*THE JOHNSON'S FAMILY VACATIONS WERE
ALWAYS VERY EXCITING.*

Wetlands are important to animals because they:

- Provide plenty of shelter for animals
- Provide migrating birds an area to rest and gather food
- Have a lot of food for animals

Other freshwater habitats include **streams** and **rivers**. These are bodies of water that move in one direction. Many rivers and streams begin from the snow on a mountain. When this snow melts, the water runs down the mountain as a small trickle. This small trickle gets larger as more water flows into the running water.

The temperature of these habitats is cooler at the beginning of the stream or river.

THIS SHOULD MAKE SENSE,



SINCE THEY CAN BEGIN FROM MELTING SNOW!

Streams and rivers provide resources for many kinds of organisms. Certain kinds of organisms can only survive within these habitats. To be even more specific, some organisms can only live in specific areas along a stream or river!

This is because the amount of resources within a stream or river changes from where it begins to where it reaches the ocean.

You mean that all rivers and streams reach the ocean?

Yes I do!

All rivers and streams end up flowing into oceans all over the world! We call the places where the rivers and streams meet the ocean **estuaries** ("es-two-air-eez").

Estuaries are a different kind of habitat. Only certain kinds of organisms, like worms, crabs and oysters, can live in these areas because of the freshwater mixing with the saltwater.



Estuaries are the doorways into the largest biome of the world:

Oceans

Oceans are **HUGE** bodies of salt water! The salt that is found in oceans comes from the bottom of the ocean floor.



Oceans are the largest biome in the world!

The oceans have different areas of warmer and colder water, just like ponds and lakes. The closer you get to the north and south poles, the colder the ocean is. The closer you get towards the middle of the earth (known as the equator), the warmer the ocean is.

Whales, dolphins, sharks, sea stars, sponges...all can be found in the ocean! You may think that there are more kinds of plants and animals in the ocean than anywhere else...

...but this is not true!

The oceans are very large and they are filled with many plants and animals. However, there are not many different species of plants and animals in this biome.

You have looked at a lot of biomes in this unit. This table will help you remember some of the important facts...

	Temperature	Water	Soil	Plants and animals
Grassland	Hot (and maybe cold)	Wet/dry season	Good nutrients	Many organisms
Deciduous forest	Hot summers, Cold winters: All four Seasons	Plenty	Good nutrients	Many organisms
Coniferous forest	Mostly cold	Plenty	Poor, rocky soil	Many organisms
Tropical rain forest	Always hot	Very wet	Poor, thin soil	Many organisms
Tundra	cold	Very dry	Poor, frozen	Migrating birds
Desert	Hot or cold	Very dry	poor	Few organisms
Aquatic	Hot to cold	Always wet	No soil	Many organisms

Circle the hidden words from below:

W E M E P O C S E R K C R J J
S E N U H M T Y E L A K E S R
J I T I A R K T A M L K I E S
R E F L E Y A C Q M U Y M E N
J C F A A W U K U P I O W G A
F H M W H N E S A R I P Y S E
G S M S Z U D N T B I I G T C
S R E U L W A S I T Y L D G O
D R D Q B Z X S C R F T A C Z
F A Y L Z B W T V L A C D R B
P C X F C S R E V I R M G U W
P O Q K H Z E S T U A R I E S
A B N Z X I X J O F W V Z S P
K O M D V Z Q M C U R B Q S P
K N S Y S N X H A Z Q G I Z I

AQUATIC
FRESHWATER
OCEANS
PONDS

BIOME
LAKES
STREAMS
RIVERS

ESTUARIES
MARINE
WETLANDS

Match the words in the first column to the best available answer in the second column.

- | | |
|---------------------|---|
| _____ Aquatic biome | 1) small bodies of freshwater moving in one direction |
| _____ Freshwater | 2) large areas of shallow water; also known as swamps |
| _____ Lakes | 3) these habitats include ponds/streams/lakes/rivers and wetlands |
| _____ Ponds | 4) a biome that includes all organisms that live within fresh water or salt water |
| _____ Wetlands | 5) large bodies of freshwater moving in one direction |
| _____ Streams | 6) small bodies of water that are surrounded by land |
| _____ Rivers | 7) saltwater habitats |
| _____ Estuaries | 8) the largest marine biome in the world |
| _____ Marine | 9) large bodies of water that are surrounded by land |
| _____ Oceans | 10) areas where rivers and streams flow into saltwater habitats |

Unit Two review

Fill in the blanks in the table below from your reading.

Biome	Temperature	Water	Soil	Plants and animals
Grassland				
Deciduous forest				
Coniferous forest				
Tropical rain forest				
Tundra				
Desert				
Aquatic				

Be certain to go over your definitions for the test!