



What Are Aquatic Ecosystems?

1. **Circle** the word **TRUE** if the statement is TRUE or **Circle** the word **FALSE** if it is FALSE.

a) Only fresh water can support life.

TRUE **FALSE**

b) An ecosystem is made up of both living and non-living things.

TRUE **FALSE**

c) Parts of a system are independent of each other.

TRUE **FALSE**

d) Some rivers contain only salt water.

TRUE **FALSE**

e) Some lakes contain only salt water.

TRUE **FALSE**

2. Put a check mark (✓) next to the answer that is most correct.

a) What is an ecologist?

- A a fish
- B a plant
- C a system
- D a scientist

b) Fresh water has very little

- A depth
- B life
- C mud
- D salt

c) All of these are living things, except

- A water
- B plants
- C insects
- D bacteria



What Are Aquatic Ecosystems?

First, we must understand what an **ecosystem** is. An ecosystem is made up of all the living things in an area of the natural world, along with the non-living resources that they depend on. The living things are called **biotic** factors, and the non-living things are called **abiotic** factors.



An Aquatic Ecosystem

An ecosystem is a **system** because the parts interact with each other. Changing one factor can have an

effect on many of the other factors. For example, if one of the plants is removed, it affects the animals that eat those plants and then the animals that eat the plant eaters. Eventually, most of the plants, animals, and some of the abiotic factors will be affected.

An ecosystem is usually thought of as being isolated from factors outside its area. This is usually not completely true because few areas of the world are completely isolated from all other ecosystems. **Ecologists** think of ecosystems as being isolated to make it easier to study and understand them. An island or a lake is an example of an area that can easily be studied as a separate ecosystem.



Identify the two types of factors that interact in an ecosystem.

An **aquatic** ecosystem is an ecosystem located in a body of water. Most aquatic ecosystems can be classified as either **marine** ecosystems or **freshwater** ecosystems. Marine ecosystems are located in oceans and in salt lakes. Freshwater ecosystems are located in ponds, lakes, streams, and rivers. Some aquatic ecosystems are also in places where salt and fresh water mix, as at the mouth of a river that flows into an ocean.



What Are Aquatic Ecosystems?

1. Put a check mark (✓) next to the answer that is most correct.

a) Which of these is an *abiotic* factor?

- A bacteria
- B fish
- C grass
- D precipitation

b) Which of these is a *biotic* factor?

- A air
- B bears
- C sunlight
- D temperature

c) Which of these could be the location of a marine ecosystem?

- A The Great Lakes
- B The Arctic Ocean
- C The Mississippi River
- D The Rocky Mountains

2. Use the words below to complete the sentences. Use each word once.

abiotic aquatic biotic ecosystem freshwater marine

- a) _____s are made up of _____ factors and _____ factors.
- b) _____ ecosystems are located in oceans.
- c) _____ ecosystems are located in inland bodies of water.
- d) _____ ecosystems are classified as either freshwater or marine.



What Are Aquatic Ecosystems?

3. Answer the questions in complete sentences.

a) Define the term "ecosystem."

b) Explain what makes an ecosystem a system.

Extensions & Applications

Factors in an aquatic ecosystem are listed below.

- air
- algae
- dolphins
- light
- lobsters
- whales
- seagulls
- seaweed
- shellfish
- soil
- temperature
- tuna
- water
- wind

Classify each factor as biotic or abiotic by writing its name in the appropriate box of the graphic organizer below.

Biotic Factors	Abiotic Factors