FRESH AND SALTWATER SYSTEMS

GLO 1 - Distribution

Ouestion 1

Two common processes are used to change saltwater into freshwater. One of these processes is distillation, while the other one forces saltwater through a filter, or membrane with holes too small for the salt to fit, in a process called ...

- A. salt diffusion
- B. reverse osmosis
- C. permeable dissolving
- D. impermeable disintegration

Question 2

Of all the water on the Earth, the only water that is fit for humans to drink is called ..

- A. pure water
- B. spring water
- C. purified water
- D. potable water

FRESH AND SALTWATER SYSTEMS

GLO 1 - Distribution

Ouestion 3

Many substances are dissolved in freshwater and saltwater. Because water is widely used to dissolve substances, it is known as the ...

- A. common solute
- B. universal solute
- C. common solvent
- D. universal solvent

Question 4

Water quality is a vital issue because many of the organisms, which can harm humans, are too small to see with the naked eye. Another organism, which can give humans intestinal problems, is Giardia, which is a microscopic...

- A. virus
- B. fungus C. parasite
- D. bacteria



FRESH AND SALTWATER SYSTEMS

GLO 1 - Water Quality

Question 7

When testing samples of water for the presence of living organisms, the students put 125ml of their samples into separate flasks and added 5 drops of Bromothymol blue. They labeled it, put a stopper in it and placed it in a warm dark place for 24 hours. What were they looking for, to indicate that living organisms were present in the water? ...

- A. A color change
- B. A temperature change
- C. The presence of bubbles
- D. A decrease in the water level







FRESH AND SALTWATER SYSTEMS

GLO 2 - Waves and Tides

Question 8

Sometimes, in order to understand a concept that is important, models are used to help us visualize it. The movement of waves can be modeled by using \dots

- A. ball bouncing
 B. a rope tied to a door
- C. dropping a rock in a pail
- D. a ball rolling down a ramp

Question 9

Waves moving on the surface of the water have changing patterns. The ripples can travel thousands of kilometers across the surface - the water itself ...

- A. travels only to the shoreline
- B. can only travel a short distance
- C. returns to the source of the wave
- D. moves only in a tiny circle in one place



FRESH AND SALTWATER SYSTEMS

GLO 1 - Water Quality

Ouestion 5

Most of the substances that are dissolved in water are salts. Not just sodium chloride, but many different kinds of salts. The total amount of all salts dissolved in the water is referred to as its...

- A. distillation
- B. potability
- C. salinity
- D. quality

Question 6

Hard water can cause pipes that carry it to become clogged with scales of minerals. Hard water is water that contains high concentrations of dissolved

- A. copper and silver
- B. calcium and chlorine
- C. hydrogen and oxygen
- D. calcium and magnesium

FRESH AND SALTWATER SYSTEMS

GLO 2 - Waves and Tides

Question 10

Ocean floor earthquakes can create extremely large waves, spreading out over a very long distance from their source, growing to be as high as a 15-storey building. These waves are called ...

- A. typhoons
- B. El Niño C tsunamis
- D. monsoons

Question 11

Stream characteristics help scientists understand where different organisms might live in a river and how they might be affected by human activities. These same stream characteristics are used when dams and bridges are designed and

- A. engineers
- B. biologists
- C. technicians
- D. environmentalists

FRESH AND SALTWATER SYSTEMS

GLO 2 - Erosion and Deposition

Use the illustration of Stream Characteristics to help you answer these questions.



Question 12

This is where the river slows down and meanders ...

- A. Stage 1
- B. Stage 2
- C. Stage 3
- D. Stage 4

This is where you will likely see the river begin to build and pick up speed ...

- A. Stage 1
- B. Stage 2 C. Stage 3
- D. Stage 4

Question 14

FRESH AND SALTWATER SYSTEMS

A river's sediment load is the amount of ...

smaller rivers and lakes. It is referred to as a ...

A. waterpark

B waterzone

C. watershed

D. waterdrain

- A. pollution it is able to filter out
- B. organisms it is able to sustain
- C. erosion it can make as it flows
- D. water-borne materials it can carry

All the area of land draining into one main lake or river can also contain many

FRESH AND SALTWATER SYSTEMS

GLO 2 - Shaping The Earth

Question 16

Glaciers move and change the landscape as they move. A glacier that is melting will leave rocks and debris it has picked up when it was growing. The melting glacier is called ...

- A. an advancing glacier
- B. a retreating glacier
- C. an eroding glacier
- D. a shifting glacier

Question 17

Continental glaciers, or icecaps cover large areas of land, forming the coldest regions on the Earth. Glaciers can also form high up in mountain ranges, where snow and ice build up over long periods of time. These glaciers are known as ...

- A. valley glaciers B. rocky glaciers
- C. moraine glaciers
- D. mountain glaciers

FRESH AND SALTWATER SYSTEMS

GLO 2 - Shaping The Earth

Question 18

Glaciers gouge huge areas of the land and then reshape the land by the materials they collect. Some of the features include large inland lakes, where the glacier has dug a huge hole and filled it with water. These inland lakes are called ...

- A. reservoirs B. esker lakes
- C. kettle lakes
- D. bucket lakes

Question 19

Currents can also affect climate. Surface currents can carry warm air or cold air depending on where the current is coming from. Currents coming from the Arctic region like the Labrador current carry cold air, and that is partly what can account for Labrador's cold climate. Scotland gets warm air from the North Atlantic Current because it comes from ...

- A. Canada
- B. The Equator
- C. The North Pole
- D. The Hawaiian Islands

FRESH AND SALTWATER SYSTEMS

GLO 2 - Water affects Climate

GLO 2 - Erosion and Deposition

Question 20

The term climate refers to the average ...

- A. length of the seasons in a particular area
- B. rainfall and hours of sunlight in a certain area
- C. precipitation and temperature in a specific area
- D. weather measured over a long period of time

Question 21

Large bodies of water can affect the climate of a particular area. The main effect that they have is to ...

- A. prevent extreme temperatures
- B. cause more precipitation to fall C. cause more extreme thunderstorms
- D. prevent more precipitation from falling

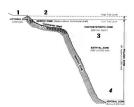
FRESH AND SALTWATER SYSTEMS

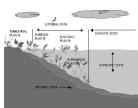
GLO 3 - Diversity

Question 22

Lakes are freshwater bodies in low areas of land. Like the oceans, they have layers, or zones. In this lake zone light penetrates and lots of plants flourish. It can be compared to this ocean zone ...

- A. Littoral
- B. Benthic
- C. Abvsmal
- D. Euphotic





FRESH AND SALTWATER SYSTEMS

GLO 3 - Diversity

Ouestion 23

The continental shelf is a shelf of land that extends out from the edge of a continent below the ocean's surface.

The water in this zone of the ocean is ...

- A. cold and dark with few species
- B, warm and dark with few nutrients
- C. cold and rich in a variety of species
- D. warm and light making it rich in nutrients

Question 24

A zone in the ocean ecosystem enabling many of the species that live there to live part of their lives out of the water is called the ...

- A. Entrophic Zone
- B. Estuary Zone
- C. Continental Zone
- D. Intertidal Zone

FRESH AND SALTWATER SYSTEMS

GLO 3 - Diversity

Ouestion 25

Organisms living on the shoreline have adapted themselves to their environment by attaching themselves to the rocks. Their hard body shell protects them from the pounding waves that constantly bombarded them. These organisms are ...

- A. clams
- B. starfish
- C. oysters D. barnacles

Question 26

In the Estuary zone water is a mixture of saltwater and freshwater. This type of water is called ...

- A. brackish water
- B. saline water C. algal bloom
- D. pure water

FRESH AND SALTWATER SYSTEMS

GLO 3 - Diversity

Question 27

Population changes can occur because of a number of factors. Extremes in temperatures occur because of these types of changes ...

- A. long-term
- B. short-term
- C. seasonal
- D. permanent

Question 28

Fish, like this Arctic Cod. live in arctic water and have a special adaptation that prevents their blood and body tissue from freezing. It is a natural ...

- A. bladder
- B. coloring
- C. antifreeze
- D. fat deposits

FRESH AND SALTWATER SYSTEMS

GLO 3 - Populations

Question 29

Zebra mussels, introduced accidentally into the Great Lakes in 1988, is an example of this type of population change ...

- A. seasonal
- B. long-term C. short-term
- D. permanent



Question 30

A population is related to a species in the following way ...

- A. A population is a specific species in a particular area
- B. A species is specific to a particular population
- C. A species is part of a specific population
- D. A specific population is part of a species

FRESH AND SALTWATER SYSTEMS

GLO 3 - Environmental Quality

Question 31

Which of the following environments would have the greatest diversity?

- A. pond
- B. puddle C. lake D. sea

Ouestion 32

Prairie lakes with high concentrations of carbonates and bicarbonates have white coatings on the rocks near the shoreline. These minerals have been dissolved out of the soil and have made the lakes ...

- A. acidic
- B. saline
- C. alkaline
- D. indicative

FRESH AND SALTWATER SYSTEMS

GLO 4 - Using Water

Question 33

Water use by humans on the Earth can be direct or indirect. When humans use water directly it is called ...

- A. industrial
- B. domestic
- C. agricultural
- D. recreational

Ouestion 34

There are many places where water is stored. Most of the water on the Earth is stored in the ...

- A. oceans
- B. ground
- C. atmosphere
- D. ice and snow

FRESH AND SALTWATER SYSTEMS GLO 4 - Using Water

Question 35

Industry uses water as a coolant, as a solvent, for washing, and for diluting pollutants when releasing them into the environment.
This table shows some of the uses and amounts.

Product or Industry	Water Required (Litres
Soap (laundry)	2000
Soda ash (ammonium soda process) 58%	72000
Canning (food)	100000
Paper	156000
Refined products (plastics)	6000000
Electric power (steam-generated)	680
Hospitals	600
Steel (rolled)	450000

Different industries use different amounts of water in their production. The industry that uses the most water is the manufacturer of ..

A. steel

B. paper C. plastics

D. canning food

FRESH AND SALTWATER SYSTEMS

GLO 4 - Using Water

Question 36

Dissolved salts, in the soil, can be deposited on the surface causing a serious side effect for this agricultural use of water ...

A. over-irrigating B. under-irrigating

C. harvesting the crops
D. groundwater depletion

Question 37

To help guard against health problems, caused by a sudden increase in the population of harmful micro-organisms in our water supply, this is done \dots

A. engineeringB. monitoringC. filtering

D. fasting

FRESH AND SALTWATER SYSTEMS

GLO 4 - Measuring Impacts

Question 38

To revitalize a dead river, so it will once again thrive, needs cooperation from scientists, Industrialists, government and people. A real success story in this regard is the ...

A. Bow RiverB. Thames RiverC. St. Lawrence riverD. South Saskatchewan River

