

## Fresh and Saltwater Systems Practice Quiz

### Topic 1 - A World of Water

1. We would have no water on the Earth in 3000 years if it were not for the water cycle. The Earth's water cycle is very important because it controls ...
  - A. the quality of the water
  - B. the temperature range of the water
  - C. the distribution of the water
  - D. the amount of water
2. Potable or fresh water represents a very small amount of water on the Earth. The amount of fresh water represent only about ....
  - A. .003%
  - B. .311%
  - C. 1.31%
  - D. 3%
3. During the Ice Ages, **glaciers** covered a large portion of the Earth's surface. In fact, at the height of the Ice Age glaciers covered as much as ...
  - A. 14% of the Earth's surface
  - B. 21% of the Earth's surface
  - C. 28% of the Earth's surface
  - D. 35% of the Earth's surface
4. Freshwater that is potable and accessible is not fairly distributed throughout the Earth. The country that has the greatest amount of fresh water is ...
  - A. Brazil
  - B. Canada
  - C. China
  - D. United States
5. In order for water systems to remain healthy and plentiful, water management policies must balance the water needs of ...
  - A. different ethnic groups around the world
  - B. people, industry, wildlife and the environment
  - C. nations that have a lot and are not using it
  - D. organisms that live off the land

## Fresh and Saltwater Systems Practice Quiz

### Topic 2 - Earth's Frozen Water

1. Glaciers are moving masses of snow and ice. A glacier that forms over an extensive area of relatively level land and flows outwards from its source is called an ...
  - A. icefield
  - B. iceberg
  - C. ice flow
  - D. ice cap
2. When there is a large crack in the glacier, this is formed ....
  - A. an icefall
  - B. a crevasse
  - C. an outflow
  - D. an ice ridge
3. Icebergs are very large chunks of ice that break off, or flow from continental glaciers into the ocean. The action of glacial ice breaking off is called ...
  - A. calving
  - B. shearing
  - C. retreating
  - D. horning
4. Glaciers shape the land when they move. Scientists know that two or mor valley glaciers have eroded a mountain summit because they see the formation of a ...
  - A. arête
  - B. cirque
  - C. horn
  - D. striation
5. Land features and formations are evidence of Glacial movement (advancing or retreating). A winding ridge of sand and gravel left behind by a retreating glacier is called ...
  - A. a moraine
  - B. a till
  - C. an outwash
  - D. an esker
6. Glaciers affect the water cycle. The direct influence they have is that they ...
  - A. speed up the volume of water when they melt
  - B. increase the mixture rate of fresh and saltwater
  - C. slow down the passage of water through the cycle
  - D. prevent groundwater from evaporating into the atmosphere

## Fresh and Saltwater Systems Practice Quiz

### Topic 3 - Fresh Water Systems

1. Water quality is tested all the time. To determine the depth to which sunlight will penetrate the water, or clarity, investigator check for ...
  - A. aquatic organisms
  - B. bacteria count
  - C. suspended matter
  - D. aquatic vegetation
2. The land feature that determines in which direction the waters will flow is called the ...
  - A. drainage plain
  - B. continental divide
  - C. elevation gradient
  - D. glacial stream
3. A raindrop landing in the extreme southeastern corner of Alberta will end up in ...
  - A. Hudson's Bay
  - B. Arctic Ocean
  - C. Atlantic Ocean
  - D. Gulf of Mexico
4. To determine what happens when land use affects a particular watershed, watershed management technicians use this tool ...
  - A. GPS
  - B. GIC
  - C. GRS
  - D. GIS
5. The reason that researchers need to know how much water is flowing through a river channel at a given time is because it helps scientists ...
  - A. predict deposition
  - B. prevent flooding
  - C. predict flooding
  - D. prevent erosion
6. The system of water that flows through porous rock is called ...
  - A. an aquifer
  - B. a riverbed
  - C. a water table
  - D. groundwater
7. Water in irrigation canals can be contaminated by from run-off containing pesticides and fertilizers. This type of contamination is considered to be ...
  - A. point sources
  - B. non-point sources
  - C. direct outflow
  - D. groundwater

## Fresh and Saltwater Systems Practice Quiz

### Topic 4 - The Oceans

- Traces of almost every chemical substance on Earth can be found in ocean water, with ocean water containing many different kinds of salts. Of the entire amount of ocean water on the surface of the Earth, sodium, chloride, magnesium, sulphate, calcium, potassium and others represent approximately ...
  - 3.5%
  - 6.67%
  - 0.67%
  - 0.35%
- When tectonic plates push against each other, mountain ranges are formed. The long underwater mountain chains that run along the centre of the oceans are the youngest areas of the sea floor and are called ....
  - mid-ocean trenches
  - abyssal plains
  - ocean ridges
  - continental slopes
- Waves move across the surface of the ocean and eventually hit the shore. When the crest eventually outruns the trough, it topples forward onto the shore and is called a ...
  - swell
  - breaker
  - tsunami
  - longshore current
- In a few places in the world - like Nova Scotia - there are "singing sands". The fiddle-like sound is made when the ...
  - waves hit the rocks
  - beaches are heated by the sun
  - particles of sand rub together
  - temperature of the air and water are the same
- The highest tide is called a spring tide and the lowest tide is called a neap tide. The difference in level between the high tide and the low tide is called the ...
  - tidal range
  - tidal shift
  - tidal divergence
  - tidal skew
- Wind patterns around the world often determine the intensity of waves in other places. In the northern hemisphere we experience westerlies, which travel in a clockwise direction. westerlies in the southern hemisphere turn in the opposite direction because ...
  - of the heat from the equator
  - the east to west rotation of the Earth
  - the west to east rotation of the Earth
  - of the tilt of the Earth's axis

## Fresh and Saltwater Systems Practice Quiz

### Topic 5 - Living In Water

1. There are many different organisms living in the oceans. The greatest diversity can be found ...
  - A. along the shoreline
  - B. in the top 180 meters
  - C. in the bottom of the ocean
  - D. along the mid-ocean ridge
2. In water that is constantly moving, aquatic organisms have adapted to this changing environment in many different ways. Sea Stars have special adaptations that help them cling to solid surfaces called ....
  - A. tentacles
  - B. tube feet
  - C. triceps
  - D. trio appendages
3. Whales are able to devour large amounts of plankton because they can filter them through this adaptation ...
  - A. gills
  - B. blubber
  - C. baleen
  - D. barnacles
4. There are many different kinds of single-celled organisms living in the oceans. More than half of the plankton is made up of single-celled ...
  - A. diatoms
  - B. amoebas
  - C. foraminifera
  - D. paramecium
5. Too many nutrients in an aquatic ecosystem can cause populations of algae to increase rapidly. Although this is good for the algae, it is not so good for other organisms because the algae ...
  - A. take up too much space
  - B. take away all the nutrients
  - C. reduce the oxygen supply
  - D. make the water smell bad
6. In the deep reaches of the ocean floor, certain bacteria can survive in this extreme environment and are able to make food and oxygen for other organisms through a process called ...
  - A. photosynthesis
  - B. chemosynthesis
  - C. hydrosynthesis
  - D. thermosynthesis

## Fresh and Saltwater Systems Practice Quiz

### Topic 6 - Water Quality and Water Management

1. Hard water contains an excessive amount of dissolved solids. Soft water contains fewer dissolved salts especially these ...
  - A. magneisum and sodium
  - B. calcium and phosphorus
  - C. sodium and phosphorus
  - D. calcium and magnesium
2. Contaminants are toxic substances that do not occur naturally in the environment, making water unsafe for living organisms. PCB's are toxic substances that are chemicals used for making ....
  - A. electrical circuits
  - B. electrical transformers
  - C. thermocouples
  - D. hydro-electric turbines
3. pH is a measure of how acidic or basic a substance is. A scale is used that ranges from 0-14. Normal rain is around 5.6 on the pH scale. Acid rain would be around ...
  - A. 0.5
  - B. 2.0
  - C. 7.0
  - D. 8.3
4. There are many different kinds of organisms that live in the lakes, ponds, rivers and streams throughout Alberta. Caddisfly larvae live in streams and rivers. They build small cases to protect themselves in the water from predators. These cases are made by using ...
  - A. secretions from their abdomen
  - B. dead organisms in the water
  - C. plant material and sand
  - D. leaves and twigs that have fallen in the water
5. Many different species that live in or near aquatic environments can be used as bioindicator species. The Whitefish Lake First Nations people are working with scientists to study the cause and effects of outbreaks of '**botulism**' in this species ...
  - A. ducks
  - B. turtles
  - C. frogs
  - D. toads
6. Water management is very important in order to achieve sustainability of this natural resource. Of the water that is available for Canadians to drink, water treatment plants have processed this much of it already ...
  - A. 25%
  - B. 48%
  - C. 57%
  - D. 81%

**Fresh and Saltwater Systems Practice Quiz**  
**Answer Key**

**Topic Quiz**

**Answer Key**

	1	2	3	4	5	6	7
<b>Topic 1</b> A World of Water	<b>C</b>	<b>D</b>	<b>C</b>	<b>A</b>	<b>B</b>		
<b>Topic 2</b> Earth's Frozen Water	<b>D</b>	<b>B</b>	<b>A</b>	<b>A</b>	<b>D</b>	<b>C</b>	
<b>Topic 3</b> Fresh Water Systems	<b>C</b>	<b>B</b>	<b>D</b>	<b>D</b>	<b>C</b>	<b>A</b>	<b>B</b>
<b>Topic 4</b> The Oceans	<b>A</b>	<b>C</b>	<b>B</b>	<b>C</b>	<b>A</b>	<b>C</b>	<b>A</b>
<b>Topic 5</b> Living In Water	<b>B</b>	<b>B</b>	<b>C</b>	<b>A</b>	<b>C</b>	<b>B</b>	
<b>Topic 6</b> Water Quality & Management	<b>D</b>	<b>B</b>	<b>B</b>	<b>C</b>	<b>A</b>	<b>C</b>	