

Question Type: Toss up
Category: Chemistry
Question Format: Multiple Choice

Question:

What is the average salinity of the open ocean?

Answer W:

20 ppt

Answer X:

25 ppt

Answer Y:

35 ppt

Answer Z:

40 ppt

Correct Answer: Y

Question Type: Bonus
Category: Chemistry
Question Format: Multiple Choice

Question:

Question: Why do tropical areas tend to be more salty than temperate areas?

Answer W:

Less evaporation in tropical areas

Answer X:

More runoff in tropical areas

Answer Y:

More evaporation in tropical areas

Answer Z:

Less precipitation in tropical areas

Correct Answer: Y

Question Type: Toss up
Category: Chemistry
Question Format: Multiple Choice

Question:

What is the halocline?

Answer W:

area of rapid change in salinity

Answer X:

area of rapid change in density

Answer Y:

area of rapid change in temperature

Answer Z:

area of rapid change in pH

Correct Answer: W

Question Type: Bonus
Category: Chemistry
Question Format: Multiple Choice

Question:

What does the rule of constant proportions state?

Answer W:

The average salinity of the ocean remains constant

Answer X:

The relative proportion of ions remains constant

Answer Y:

The salinity of the ocean constant over latitude

Answer Z:

The salinity of the ocean is constant over depth

Correct Answer: X

Question Type: Toss up
Category: Chemistry
Question Format: Multiple Choice

Question:
What are the two most common ions in seawater?

Answer W:
K and Cl

Answer X:
Na and K

Answer Y:
Na and bicarbonate

Answer Z:
Na and Cl

Correct Answer: Z

Question Type: Bonus
Category: Chemistry
Question Format: Multiple Choice

Question:
How is the ocean buffered against changes in pH?

Answer W:
Oxygen gets converted to bicarbonate

Answer X:
CO₂ forms carbonic acid

Answer Y:
Carbonic acid gets converted to acid

Answer Z:
Carbonic acid gets converted to biocarbonate

Correct Answer: Z

Question Type: Toss up
Category: Chemistry
Question Format: Multiple Choice

Question:

At what temperature is water the densest?

Answer W:

0C

Answer X:

2C

Answer Y:

4C

Answer Z:

100C

Correct Answer: Y

Question Type: Bonus
Category: Chemistry
Question Format: Multiple Choice

Question:

Why does the oxygen minimum zone form?

Answer W:

There is no photosynthesis at the surface

Answer X:

Decomposition occurs below the photic zone

Answer Y:

Decomposition occurs in the photic zone

Answer Z:

Deep water mixes with surface water

Correct Answer: X

Question Type: Toss up
Category: Chemistry
Question Format: Multiple Choice

Question:
What is the average pH of seawater?

Answer W:
6

Answer X:
7

Answer Y:
8

Answer Z:
9

Correct Answer: Y

Question Type: Bonus
Category: Chemistry
Question Format: Multiple Choice

Question:
How are icebergs formed?

Answer W:
Ice forming in the deep ocean

Answer X:
Ice freezing over the ocean

Answer Y:
Ice freezing over lakes

Answer Z:
Ice breaking off of glaciers

Correct Answer: Z

Question Type: Toss up
Category: Chemistry
Question Format: Multiple Choice

Question:
What does salinity measure?

Answer W:
The total amount of gas in the water

Answer X:
The total amount of Na and Cl

Answer Y:
The total amount of dissolved inorganic solids

Answer Z:
The total amount of organic compounds in the water

Correct Answer: Y

Question Type: Bonus
Category: Chemistry
Question Format: Multiple Choice

Question:
How does the formation of sea ice affect the salinity of the surrounding water?

Answer W:
Decreases the salinity

Answer X:
Increases the salinity

Answer Y:
There is no affect

Answer Z:
Makes the water less salty

Correct Answer: X

Question Type: Toss up
Category: Chemistry
Question Format: Multiple Choice

Question:

In what units of measure is salinity traditionally expressed?

Answer W:

grams

Answer X:

parts per million

Answer Y:

percent

Answer Z:

Parts per thousand

Correct Answer: Z

Question Type: Bonus
Category: Chemistry
Question Format: Multiple Choice

Question:

What percent does dissolved Oxygen take up in sea water?

Answer :W

34%

Answer X:

40%

Answer Y:

36%

Answer Z:

42%

Correct Answer: Y