



KEEP
CALM
AND
OCEAN
BOWL ON

TOSS-UP #1 Multiple Choice - Biology

Which of the following fish is an example of holoplankton?

- W. bluefin tuna
- X. star fish
- Y. sea urchin
- Z. dinoflagellates**

BONUS #1 Short Answer - Biology

What is the term used to describe a fish that spends only part of its life as a microscopic organism?

ANSWER: meroplankton

TOSS-UP #2 Multiple Choice - Physical

Which of the following is a cold water current?

- W. Peru (Humboldt) Current**
- X. Norwegian Current
- Y. Kuroshio Current
- Z. North Pacific Current

BONUS #2 Short Answer - Physical

What is a ringlike body of water consisting of major boundary currents called?

ANSWER: gyre

TOSS-UP #3 Multiple Choice - Physical

What sea lies between Yemen and Somalia?

- W. Red Sea
- X. Persian Gulf
- Y. Gulf of Aden**
- Z. Gulf of Oman

BONUS #3 Short Answer - Biology

What sea is alone in that it has no physical land barriers?

ANSWER: Sargasso Sea

TOSS-UP #4 Multiple Choice - Chemical

What is the third most common ion in seawater?

- W. chloride (Cl^-)
- X. sulfate (SO_4^{2-})**
- Y. magnesium (Mg^{2+})
- Z. bicarbonate (HCO_3^-)

BONUS #4 Short Answer - Physical

Name the two most common ions in seawater in order from highest concentration to lowest.

ANSWER: chloride and sodium

TOSS-UP #5 Multiple Choice - Technology

What submarine was the first to circumnavigate the globe while submerged?

- W. USS Nautilus
- X. Plongeur
- Y. Alvin
- Z. USS Triton**

BONUS #5 Short Answer - Technology

In what year was this feat accomplished?

ANSWER: 1960

TOSS-UP #6 Multiple Choice - Technology

The first humans to descend to the bottom of the Mariana Trench were aboard what vessel?

- W. Alvin
- X. Deepsea Challenger
- Y. Nereus
- Z. Trieste**

BONUS #6 Short Answer - Technology

What were the names of the two people on board?

ANSWER: Jacques Piccard and Don Walsh

TOSS-UP #7 Multiple Choice - Technology

At a depth of around 30,000 feet into its descent into the Mariana Trench, what broke on the Trieste that rattled the whole ship?

- W. generator
- X. outer window**
- Y. outer wall panel
- Z. periscope

BONUS #7 Short Answer - Technology

While at the bottom, the Trieste unexpectedly regained the ability to what?

ANSWER: communicate with USS Wandank (ATA-204) above the surface

TOSS-UP #8 Multiple Choice - Physical

Which of the following is a cold water current?

- W. Peru (Humboldt) Current**
- X. Norwegian Current
- Y. Kuroshio Current
- Z. North Pacific Current

BONUS #8 Short Answer - Physical

What is a ringlike body of water consisting of major boundary currents called?

ANSWER: gyre

TOSS-UP #9 Multiple Choice - Physical

The European discovery of the Gulf Stream is largely dated to the 1512 expedition of whom?

- W. James Cook
- X. Ferdinand Magellan
- Y. Benjamin Franklin
- Z. Juan Ponce de León**

BONUS #9 Short Answer - Physical

Who did Benjamin Franklin ask in order to help him map the Gulf Stream?

ANSWER: Timothy Folger

TOSS-UP #10 Multiple Choice - Physical

What is a secchi disk used to measure?

- W. temperature
- X. sediment pH
- Y. turbidity**
- Z. salinity

BONUS #10 Short Answer - Physical

How is a secchi disk used?

ANSWER: lowered into water on a pole or line and the depth at which it can not be seen (secchi depth) is a measurement of the waters transparency

TOSS-UP #11 Multiple Choice - Biology

What whale is known to have the longest baleen plates?

- W. Right whales**
- X. Bowhead whales
- Y. Blue whales
- Z. Humpback whales

BONUS #11 Short Answer - Biology

What substance is baleen made of?

ANSWER: keratin

TOSS-UP #12 Multiple Choice - Biology

The largest known invertebrate was caught in what sea in 2007?

- W. Ross Sea**
- X. Sargasso Sea
- Y. Weddell Sea
- Z. Bering Sea

BONUS #12 Short Answer - Biology

What animal has the largest eye (11 inches) of any living animal?

ANSWER: colossal squid

TOSS-UP #13 Multiple Choice - Biology

What species of penguin is the most numerous penguin with 11.6 million breeding pairs?

- W. Little Blue
- X. Rockhopper
- Y. Macaroni**
- Z. African

BONUS #13 Short Answer - Biology

As a rockhopper penguin matures, what color do its irises turn?

ANSWER: red

TOSS-UP #14 Multiple Choice - Biology

What country has the largest population of little blue penguins?

- W. Australia**
- X. New Zealand
- Y. Argentina
- Z. South Africa

BONUS #14 Short Answer - Biology

The logo of what popular computer-related company was inspired when a little blue pecked at its founder?

ANSWER: Linux

TOSS-UP #15 Multiple Choice - Technology

The Titanic made stops to pick up passengers at all but which of the following?

- W. Southampton, England
- X. Cherbourg, France
- Y. Queenstown, Ireland
- Z. Oostende, Belgium

BONUS #15 Short Answer - Technology

In order from first to last, name this cities the Titanic visited on its maiden voyage including city of departure.

ANSWER: Belfast, Southampton, Cherbourg, Queenstown

TOSS-UP #16 Multiple Choice - Physical Oceanography

Which island is not one of the three biggest islands?

- W. Borneo
- X. Greenland
- Y. New Guinea
- Z. **Madagascar**

BONUS #16 Short Answer - Physical Oceanography

What is the name of the largest Antarctic island?

ANSWER: Alexander Island

TOSS-UP #17 Multiple Choice - Physical Oceanography

Which boundary current is strongest?

- W. north
- X. south
- Y. east
- Z. west**

BONUS #17 Short Answer - Physical Oceanography

Who, in 1948, explained how friction and the Coriolis effect made western boundary currents the strongest?

ANSWER: Henry Stommel

TOSS-UP #18 Multiple Choice - Physical Oceanography

Approximately what percentage of ocean water is made up of surface currents?

- W. 5%
- X. 10%**
- Y. 20%
- Z. 30%

BONUS #18 Short Answer - Physical Oceanography

Gradients of what cause deep ocean currents?

ANSWER: density

TOSS-UP #19 Multiple Choice - Biology

How many species of penguins are there?

W. 10

X. 17

Y. 26

Z. 32

BONUS #19 Short Answer - Biology

What condition similar to albinism results in a penguin's coat being a very light tan rather than black?

ANSWER: isabellism

TOSS-UP #20 Multiple Choice - Biology

Waiting for a certain condition, Adélie did not arrive on the Antarctic continent until approximately how long ago?

W. 6,000 years ago

X. 10,000 years ago

Y. 120,000 years ago

Z. 210,000 years ago

BONUS #20 Short Answer - Biology

What was this condition?

ANSWER: they need firm, ice-free ground for nests

TOSS-UP #21 Multiple Choice - Biology

Emperor penguins have been known to dive to what depth?

W. 300 feet

X. 650 feet

Y. 1,550 feet

Z. 1,800 feet

BONUS #21 Short Answer - Biology

What rule states that larger species tend to live in colder environments, while smaller species tend to live in warmer environments (as with penguin distribution)?

ANSWER: Bergmann's Rule

TOSS-UP #22 Multiple Choice - Physical Oceanography

Approximately what percent of an iceberg lies underwater?

W. 20%

X. 50%

Y. 90%

Z. 95%

BONUS #22 Short Answer - Biology

What ice shelf experienced a major portion running nearly its entire length break off into two icebergs on April 7th, 2016? Nansen Ice Shelf

TOSS-UP #23 Multiple Choice - Biology

What crested penguin is also named Sclater's crested penguin?

- W. Macaroni
- X. Erect-crested**
- Y. Snares
- Z. Fiordland

BONUS #23 Short Answer - Biology

What is the genus name of crested penguins?

ANSWER: Eudyptes

TOSS-UP #24 Multiple Choice - Biology

Waiting for a certain condition, Adélie did not arrive on the Antarctic continent until approximately how long ago?

- W. 6,000 years ago**
- X. 10,000 years ago
- Y. 120,000 years ago
- Z. 210,000 years ago

BONUS #24 Short Answer - Biology

What was this condition?

ANSWER: they need firm, ice-free ground for nests

TOSS-UP #23 Multiple Choice - Biology

What crested penguin is also named Sclater's crested penguin?

- W. Macaroni
- X. Erect-crested**
- Y. Snares
- Z. Fiordland

BONUS #23 Short Answer - Biology

What is the genus name of crested penguins?

ANSWER: Eudyptes

TOSS-UP #24 Multiple Choice - Biology

Waiting for a certain condition, Adélie did not arrive on the Antarctic continent until approximately how long ago?

- W. 6,000 years ago**
- X. 10,000 years ago
- Y. 120,000 years ago
- Z. 210,000 years ago

BONUS #24 Short Answer - Biology

What was this condition?

ANSWER: they need firm, ice-free ground for nests

TOSS-UP #25 Multiple Choice - Physical

What period of the tidal cycle has the least amount of movement?

- W. Neap tide
- X. Spring tide
- Y. Slack tide**
- Z. Ebb tide

BONUS #25 Short Answer - Physical

What is the name for a zone in the ocean where the salinity of the water rapidly changes with depth?

ANSWER: Halocline

TOSS-UP #26 Multiple Choice - Geology

Off the northern coast of New Zealand, what trench contains the 35,700 feet deep Horizon Deep, second only to the Challenger deep of the Mariana Trench?

- W. Tonga Trench**
- X. Java Trench
- Y. Puerto Rico Trench
- Z. Ryukyu Trench

BONUS #29 Short Answer - Geology

To the nearest thousand miles, about how long is the Tonga Trench?

ANSWER: 1,000 miles

