Question Type: Tossup
Question Format: Multiple Choice
Category: Biology

Question:
Northern elephant seals come ashore during the spring and summer to do what?

Answer W:
Mate

Answer X:
Give birth

Answer Y:
Eat

Answer Z:
Molt their fur

Correct Answer: Z: Molt their fur

Packet: Final Number: 1 Question ID: 19383 Pair: 1
Question Type: Bonus
Question Format: Short Answer
Category: Biology

Question:
Which organisms form the base of the food chain at hydrothermal vents due to their ability to convert carbon and nutrients into organic matter in the absence of sunlight?

Correct Answer:
Chemosynthetic Bacteria

Packet: Final Number: 1 Question ID: 19432 Pair: 1
**Question Type:** Tossup  
**Question Format:** Multiple Choice  
**Category:** Chemical

**Question:**
Together, sodium and chloride alone comprise approximately what percent of the total salts in the ocean?

**Answer W:**
100

**Answer X:**
90

**Answer Y:**
50

**Answer Z:**
10

**Correct Answer:** X: 90

**Packet:** Final **Number:** 1  **Question ID:** 19372  **Pair:** 2
Question Type: Bonus
Question Format: Short Answer
Category: Chemistry

Question:
Name two sources of molecular oxygen on the surface of the ocean.

Correct Answer:
1. Transport of oxygen from the atmosphere to the ocean surface across the air-sea interface.
2. Photosynthesis in the photic zone.

Packet: Final Number: 1 Question ID: 21282   Pair: 2
**Question Type:** Tossup  
**Question Format:** Multiple Choice  
**Category:** Biology

**Question:**  
The habitat of blue whales, tunas and swordfishes is best described as:

**Answer W:**  
Benthic

**Answer X:**  
Littoral

**Answer Y:**  
Estuarine

**Answer Z:**  
Pelagic

**Correct Answer:** Z: Pelagic

**Packet:** Final  
**Number:** 1  
**Question ID:** 19493  
**Pair:** 3
Question Type: Bonus
Question Format: Short Answer
Category: Geography

Question:
A semi-enclosed body of water where river water mixes with ocean water is called:

Correct Answer:
Estuary

Packet: Final Number: 1 Question ID: 20780   Pair: 3
Question Type: Tossup
Question Format: Multiple Choice
Category: Chemical

Question:
Which of the following are NOT impacted by the decreasing pH levels in ocean water, termed ocean acidification?

Answer W:
Growth rates of coral reefs

Answer X:
Mollusk shells

Answer Y:
Diatom shells

Answer Z:
Shark’s teeth

Correct Answer: Y: Diatom Shells

Packet: Final Number: 1Question ID: 21153Pair: 4
Question Type: Bonus  
Question Format: Short Answer  
Category: Geology

Question:
Lithospheric plates come together at which type of plate boundary?

Correct Answer:
Convergent

Packet: Final  
Number: 1  
Question ID: 19430  
Pair: 4
**Question Type:** Tossup  
**Question Format:** Multiple Choice  
**Category:** Chemical

**Question:**
What chemical is the principle source of energy at many of Earth’s hydrothermal vent systems?

**Answer W:**  
Oxygen

**Answer X:**  
Carbon dioxide

**Answer Y:**  
Hydrogen Sulfide

**Answer Z:**  
Iron Oxide

**Correct Answer:** Y: Hydrogen Sulfide

**Packet:** Final  
**Number:** 1  
**Question ID:** 21143  
**Pair:** 5
Question Type: Bonus
Question Format: Short Answer
Category: Marine Policy

Question:
An international agreement to reduce emissions of greenhouse gases was negotiated in Japan in 1997; it was later ratified by many countries, but not by the US. The name of this agreement is:

Correct Answer:
The Kyoto Protocol (or treaty)

Packet: Final  Number: 1  Question ID: 19377  Pair: 5
Question Type: Tossup
Question Format: Multiple Choice
Category: Biology

Question:
Intensive aquaculture of which of the following organisms has contributed to loss of mangroves around the world?

Answer W:
Tilapia

Answer X:
Cod

Answer Y:
Shrimp

Answer Z:
Salmon

Correct Answer: Y: Shrimp

Packet: Final Number: 1 Question ID: 19492 Pair: 6
Question Type: Bonus  
Question Format: Multiple Choice  
Category: Chemical

Question:
When traveling down the water column which will dissolve first?

Answer W:
A shell composed of aragonite

Answer X:
A shell composed of calcite

Answer Y:
Neither will dissolve

Answer Z:
A shell composed of calcium carbonate

Correct Answer: W: A shell composed of aragonite

Packet: Final  Number: 1  Question ID: 21136  Pair: 6
Question Type: Tossup
Question Format: Multiple Choice
Category: Geography

Question:
Which continent does NOT border the Indian Ocean?

Answer W:
Africa

Answer X:
Asia

Answer Y:
North America

Answer Z:
Australia

Correct Answer: Y: North America

Packet: Final Number: 1 Question ID: 19409 Pair: 7
Question Type: Bonus
Question Format: Short Answer
Category: Marine Policy

Question:
Though commercial exploitation of this long-living, popular restaurant fish began in the late 1980s, stocks are already exhausted off the coasts of Argentina and South Africa.

Correct Answer:
Patagonian toothfish or Chilean sea bass

Packet: Final Number: 1 Question ID: 19394 Pair: 7
**Question Type:** Tossup  
**Question Format:** Multiple Choice  
**Category:** Geology

**Question:**
Which of the following is NOT an example of a metamorphic rock?

**Answer W:**
Gneiss

**Answer X:**
Schist

**Answer Y:**
Marble

**Answer Z:**
Basalt

**Correct Answer:** Z: Basalt

**Packet:** FinalNumber: 1  
**Question ID:** 19243  
**Pair:** 8
Question Type: Bonus  
Question Format: Short Answer  
Category: Physical

Question:
What is the name for a zone where temperature rapidly changes with depth?

Correct Answer:
Thermocline

Packet: Final  Number: 1  Question ID: 20694  Pair: 8
Question Type: Tossup
Question Format: Multiple Choice
Category: Geography

Question:
Which landmass straddles a mid-ocean ridge?

Answer W:
Madagascar

Answer X:
Iceland

Answer Y:
Greenland

Answer Z:
Australia

Correct Answer: X: Iceland

Packet: Final Number: 1 Question ID: 19405 Pair: 9
**Question Type:** Bonus  
**Question Format:** Short Answer  
**Category:** Geology

**Question:**  
Most of the sand on tropical islands is made up of what substance?

**Correct Answer:**  
Calcium Carbonate shell fragments

**Packet:** Final  
**Number:** 1  
**Question ID:** 19262  
**Pair:** 9
Question Type: Tossup
Question Format: Multiple Choice
Category: Biology

Question:
Lophelia (LO-fee-lee-ua) coral reefs in the North Atlantic are being primarily damaged by:

Answer W:
Rising temperature

Answer X:
Trawling

Answer Y:
Cyanide poisoning

Answer Z:
Pfiesteria (fi-stear-ee-ah)

Correct Answer: X: Trawling

Packet: Final Number: 1
Question ID: 20182
Pair: 10
Seals have a variety of adaptations for deep dives. To avoid nitrogen narcosis, which adaptation is most helpful?

**Answer W:**
ATP production by fermentation rather than respiration

**Answer X:**
Exhaling at the start of the dive and collapsing the lungs

**Answer Y:**
Reliance upon stored oxygen in blood and muscles

**Answer Z:**
Re-routing blood flow to where it is most needed

**Correct Answer:** X: Exhaling at the start of the dive and collapsing the lungs
Question Type: Tossup
Question Format: Multiple Choice
Category: Geography

Question:
Which region is known by the nickname “Pirate Alley” due to the large amount of pirate activity in the area?

Answer W:
Yellow Sea

Answer X:
Arabian Sea

Answer Y:
Okhotsk Sea

Answer Z:
Gulf of Aden

Correct Answer: Z: Gulf of Aden

Packet: Final Number: 1 Question ID: 19396 Pair: 11
**Question**: Stokes Law states that the sinking velocity of a particle depends on which of the following factors?

**Answer W**: Whether the particle is phytoplankton or detritus

**Answer X**: The stratification of the water column

**Answer Y**: The intensity of wave action at the surface

**Answer Z**: The size and density of the particle

**Correct Answer**: Z: The size and density of the particle

**Packet**: Final **Number**: 1 **Question ID**: 20370 **Pair**: 11
Question Type: Tossup  
Question Format: Multiple Choice  
Category: Geology  

Question: Defined as mass per unit volume, what property is a useful means of identifying rocks and minerals?  

Answer W: Relativity  

Answer X: Density  

Answer Y: Luminosity  

Answer Z: Heat Flow  

Correct Answer: X: Density  

Packet: Final Number: 1 Question ID: 19252 Pair: 12
Question Type: Bonus
Question Format: Multiple Choice
Category: Marine Policy

Question:
What 1979 Act gave the EPA the power to monitor and regulate the disposal of sewage sludge, industrial waste, radioactive waste and biohazardous materials into the nation's territorial waters?

Answer W:
Oil Ocean Act

Answer X:
Anti-Debris Act

Answer Y:
Debris Reduction Act

Answer Z:
Ocean Dumping Act

Correct Answer: Z: Ocean Dumping Act

Packet: Final Number: 1 Question ID: 21440 Pair: 12
Question Type: Tossup
Question Format: Multiple Choice
Category: Physical

Question:
What part of a tidal cycle has minimal current?

Answer W:
Ebb tide

Answer X:
Slack tide

Answer Y:
Flood tide

Answer Z:
Lunar tide

Correct Answer: X: Slack Tide

Packet: Final Number: 1 Question ID: 19382 Pair: 13
**Question Type:** Bonus  
**Question Format:** Short Answer  
**Category:** Physical

**Question:**  
In the wave equation, C equals L divided by T. What are the variables C, L, and T?

**Correct Answer:**  
C = wave speed  
L = wavelength  
T = wave period

**Packet:** Final  
**Number:** Question ID: 21210  
**Pair:** 13
Question Type: Tossup
Question Format: Multiple Choice
Category: Marine Policy

Question:
What United Nations conference, also known as the Earth Summit, led to the agreement to protect the biodiversity on Earth?

Answer W:
United Nations Conference on Trade and Development

Answer X:
United Nations Conference on Environment and Development

Answer Y:
United Nations Conference on the Human Environment

Answer Z:
Habitat International Coalition Conference


Packet: Final Number: 1 Question ID: 19549 Pair: 14
**Question Type:** Bonus
**Question Format:** Short Answer
**Category:** Social Sciences

**Question:**
How often have men descended to the Challenger Deep?

**Correct Answer:**
Once

**Packet:** Final
**Number:** 1
**Question ID:** 19389
**Pair:** 14
**Question Type:** Tossup  
**Question Format:** Multiple Choice  
**Category:** Physical

**Question:**
Which of the following is NOT a predominant characteristic of subtropical regions?

**Answer W:**
Weak winds

**Answer X:**
Weak surface currents

**Answer Y:**
Clear skies with abundant sunshine

**Answer Z:**
Stormy weather with high winds

**Correct Answer:** Z: Stormy weather with high winds

**Packet:** Final  
**Number:** 1  
**Question ID:** 19427  
**Pair:** 15
The voyage of the HMS Beagle is famous for what reason?

Information collected during the voyage led to the theory of evolution when Charles Darwin was aboard.
**Question Type:** Tossup  
**Question Format:** Multiple Choice  
**Category:** Marine Policy

**Question:**  
In what year did the North American Pacific herring fishery collapse?

**Answer W:**  
1990

**Answer X:**  
1993

**Answer Y:**  
1995

**Answer Z:**  
2000

**Correct Answer:** X: 1993

**Packet:** Final  
**Number:** 1  
**Question ID:** 20137  
**Pair:** 16
Question Type: Bonus
Question Format: Short Answer
Category: Social Sciences

**Question:**
In 1933, the US tanker Ramapo encountered the highest wind wave ever measured reliably. How tall was this wave?

**Answer W:**
12 meters

**Answer X:**
23 meters

**Answer Y:**
34 meters

**Answer Z:**
45 meters

**Correct Answer:** Y: 34 meters

**Packet:** Final Number: 1 Question ID: 20898 Pair: 16
Question Type: Tossup
Question Format: Multiple Choice
Category: Chemical

Question:
Which of the following is a characteristic of an estuarine turbidity maximum?

Answer W:
Increased flocculation

Answer X:
Low suspended sediment concentrations

Answer Y:
Kelvin waves

Answer Z:
Temperature change

Correct Answer: W: Increased flocculation

Packet: Final Number: 1 Question ID: 20137   Pair: 17
Question Type: Bonus
Question Format: Short Answer
Category: Biology

Question:
In 2006, which expedition, led by the grandson of Thor Heyerdahl (Higher-doll), replicated the 1947 Kon Tiki voyage?

Answer W:
Thor Tiki

Answer X:
Nordic Voyage

Answer Y:
Equatorial expedition

Answer Z:
Tangaroa expedition

Correct Answer: Z: Tangaroa expedition

Packet: FinalNumber: 1 Question ID: 20898 Pair: 17
**Question Type:** Tossup  
**Question Format:** Multiple Choice  
**Category:** Geology

**Question:**
High tidal range coastlines do NOT feature:

**Answer W:**
Large tidal flats

**Answer X:**
Broad marshes

**Answer Y:**
Amphidromic points

**Answer Z:**
Strong currents

**Correct Answer:** Y: Amphidromic points

**Packet:** Final  
**Number:** 1  
**Question ID:** 20137  
**Pair:** 18
Question Type: Bonus
Question Format: Short Answer
Category: Geography

Question:
Name the marginal sea which lies between South Korea and the People's Republic of China.

Correct Answer:
Yellow Sea

Packet: Final Number: 1 Question ID: 20898    Pair: 18
Question Type: Tossup
Question Format: Multiple Choice
Category: Marine Policy

Question:
This national marine sanctuary, sometimes called The Galapagos of California, is home to kelp forests, sea lions and blue whales.

Answer W:
Stellwagen Bank

Answer X:
Channel Islands

Answer Y:
Monterey Bay

Answer Z:
Olympic Coast

Correct Answer: X: Channel Islands

Packet: Final Number: 1 Question ID: 20137 Pair: 19
What does the term sigma-t define?

**Answer W:** The specific gravity of sea water

**Answer X:** The density anomaly of sea water

**Answer Y:** The density of sea water

**Answer Z:** The statistical variation in the density of sea water

**Correct Answer:** X: The density anomaly of sea water
**Question Type:** Tossup  
**Question Format:** Multiple Choice  
**Category:** Geology

**Question:**
What is the approximate age of the oldest oceanic crust?

**Answer W:**  
100 thousand years

**Answer X:**  
1 million years

**Answer Y:**  
50 million years

**Answer Z:**  
180 million years

**Correct Answer:** Z: 180 million years

**Packet:** Final  
**Number:** 1  
**Question ID:** 20137  
**Pair:** 20
Question Type: Bonus
Question Format: Short Answer
Category: Geography

Question:
Name the strait which connects the Red Sea and the Gulf of Aden and is known as the "Gate of Tears."

Correct Answer:
Bab el Mandeb (also accept Mandab or Mandib Strait)

Packet: Final Number: 1 Question ID: 20898  Pair: 20