

**Question Type:** Toss-up  
**Category:** Physical  
**Question Format:** Multiple Choice

**Question:**  
The largest ocean in the world is the:

**Answer W:**  
Pacific

**Answer X:**  
Atlantic

**Answer Y:**  
Indian

**Answer Z:**  
Arctic

**Correct Answer:** W

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**Question Type:** Bonus  
**Category:** Physical  
**Question Format:** Multiple Choice

**Question:**  
What property of seawater is defined as the total amount of dissolved solids in seawater?

**Answer W:**  
nutrient level

**Answer X:**  
salinity

**Answer Y:**  
density

**Answer Z:**  
Specific weight

**Correct Answer:** X

Buzzer Question

**Question Type:** Toss-up

**Category:** Technology

**Question Format:** Multiple Choice

**Question:**

When diving, rapid ascent from great depth can cause which painful illness that may cause death?

**Answer W:**

Bends

**Answer X:**

Hypothermia

**Answer Y:**

Anoxia

**Answer Z:**

Asphyxiation

**Correct Answer:** W

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Buzzer Question

**Question Type:** Bonus

**Category:** Technology

**Question Format:** Multiple Choice

**Question:**

The Alvin is categorized as what type of marine technology equipment?

**Answer W:**

Remotely Operated vehicle

**Answer X:**

Autonomous Underwater Vehicle

**Answer Y:**

Manned Submersible

**Answer Z:**

Research Vessel

**Correct Answer:** Y

Buzzer Question

**Question Type:** Toss-up

**Category:** Technology

**Question Format:** Multiple Choice

**Question:**

The chronometer developed by John Harrison was valuable because it made possible the determination of what at sea.

**Answer W:**

Direction

**Answer X:**

Time

**Answer Y:**

Longitude

**Answer Z:**

Latitude

**Correct Answer:** Y

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Buzzer Question

**Question Type:** Bonus

**Category:** Technology

**Question Format:** Short Answer

**Question:**

Side scan sonar machines are used in oceanography to collect what type of data?

**Correct Answer:** Seafloor bathymetry

Buzzer Question

**Question Type:** Toss-up

**Category:** Geology

**Question Format:** Multiple Choice

**Question:**

Dating of ocean floor samples by the Deep Sea Drilling Project showed that ocean crust gets progressively.

**Answer W:**

younger with increasing distance from the mid-ocean ridge.

**Answer X:**

more exposed with increasing distance from the mid-ocean ridge.

**Answer Y:**

less exposed with increasing distance from the mid-ocean ridge.

**Answer Z:**

older with increasing distance from the mid-ocean ridge.

**Correct Answer:** Z

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Buzzer Question

**Question Type:** Bonus

**Category:** Geology

**Question Format:** Short Answer

**Question:**

Alfred Wegener conceived of a single ancient landmass called \_\_\_\_\_ that began to break apart about 180 million years ago.

**Correct Answer:** Pangaea

Buzzer Question

**Question Type:** Toss-up

**Category:** Geology

**Question Format:** Multiple Choice

**Question:**

The region of the Earth that is rigid, mobile, and contains the continents is called:

**Answer W:**

asthenosphere

**Answer X:**

Core

**Answer Y:**

Lithosphere

**Answer Z:**

mantle

**Correct Answer:** Y

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Buzzer Question

**Question Type:** Bonus

**Category:** Physical

**Question Format:** Short Answer

**Question:**

What are the two most common dissolved ions in seawater.

Correct answer: Chloride and Sodium

Buzzer Question

**Question Type:** Bonus

**Category:** Geology

**Question Format:** Multiple Choice

**Question:**

A mantle plume can rise from deep within the mantle to create what surface feature.

**Answer W:**

hotspot

**Answer X:**

tectonic activity

**Answer Y:**

seamount

**Answer Z:**

mid ocean ridge

**Correct Answer:** W

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Buzzer Question

**Question Type:** Bonus

**Category:** Physical

**Question Format:** Short Answer

**Question:**

The early oceans and atmosphere are thought to have come from inside Earth and were formed by a process called

**Correct Answer:** Outgassing

Buzzer Question

**Question Type:** Toss-up

**Category:** Geology

**Question Format:** Multiple Choice

**Question:**

When the leading edge of two converging plates is composed of oceanic crust, what system will form?

**Answer W:**

hotspot

**Answer X:**

Island arc

**Answer Y:**

Trench

**Answer Z:**

mid-oceanic ridge

**Correct Answer:** X

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Buzzer Question

**Question Type:** Bonus

**Category:** Biology

**Question Format:** Short answer

**Question:**

A circular coral reef that has a well-developed lagoon and no visible central volcanic island would be in what stage of coral reef formation?

**Correct Answer:** Atoll

Buzzer Question

**Question Type:** Toss-up

**Category:** Geology

**Question Format:** Multiple Choice

**Question:**

The Andes Mountains have formed as a result of oceanic crust converging with what other crust.

**Answer W:**

lithospheric

**Answer X:**

continental

**Answer Y:**

islandic

**Answer Z:**

aesthnopheric

**Correct Answer: X**

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Buzzer Question

**Question Type:** Bonus

**Category:** Geology

**Question Format:** Short Answer

**Question:**

What surface feature is thought to be the cause of the formation of the Hawaiian Islands.

**Correct Answer: Hotspot**



Buzzer Question

**Question Type:** Toss-up

**Category:** Geology

**Question Format:** Multiple Choice

**Question:**

What plate boundary is created where two plates come together?

**Answer W:**

convergent

**Answer X:**

divergent

**Answer Y:**

continental

**Answer Z:**

oceanic

**Correct Answer: W**

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Buzzer Question

**Question Type:** Bonus

**Category:** Geology

**Question Format:** Short Answer

**Question:**

What plate boundary is created where two plates move away from each other.

**Correct Answer: Divergent**

Buzzer Question

**Question Type:** Toss-up

**Category:** Physical

**Question Format:** Multiple Choice

**Question:**

What is the most important factor affecting surface seawater density?

**Answer W:**

pressure

**Answer X:**

temperature

**Answer Y:**

depth

**Answer Z:**

salinity

**Correct Answer: X**

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Buzzer Question

**Question Type:** Bonus

**Category:** Physical

**Question Format:** Multiple Choice

**Question:**

What is the average salinity of ocean water?

**Answer W:**

10

**Answer X:**

35

**Answer Y:**

55

**Answer Z:**

75

**Correct Answer: X**

Buzzer Question

**Question Type:** Toss-up

**Category:** Biology

**Question Format:** Multiple Choice

**Question:**

What group of marine mammals includes sea lions, seals, and walruses.

**Answer W:**

Carnivora

**Answer X:**

Mysticeti

**Answer Y:**

Sirenia

**Answer Z:**

Pinnipeds

**Correct Answer: Z**

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Buzzer Question

**Question Type:** Bonus

**Category:** Biology

**Question Format:** Short answer

**Question:**

What is the only marine mammal that has large ivory tusks (elongate canine teeth)?

**Correct Answer:** Walrus

Buzzer Question

**Question Type:** Toss-up

**Category:** Biology

**Question Format:** Multiple Choice

**Question:**

The "mermaids of the sea" (manatees and dugongs) are representatives of order?

**Answer W:**

Carnivora

**Answer X:**

Mysticeti

**Answer Y:**

Sirenia

**Answer Z:**

Pinnipeds

**Correct Answer: Y**

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Buzzer Question

**Question Type:** Bonus

**Category:** Biology

**Question Format:** Multiple Choice

**Question:**

Eastern Pacific Gray whales migrate from summer feeding grounds in the Bering and Chukchi Seas to winter breeding and calving lagoons offshore of...?

**Answer W:**

India

**Answer X:**

Africa

**Answer Y:**

Spain

**Answer Z:**

Baja California

**Correct Answer: Z**

Buzzer Question

**Question Type:** Toss-up

**Category:** Biology

**Question Format:** Multiple Choice

**Question:**

What fin is most commonly used for propulsion?

**Answer W:**

Caudal

**Answer X:**

Dorsal

**Answer Y:**

Pectoral

**Answer Z:**

Pelvic

**Correct Answer: W**

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Buzzer Question

**Question Type:** Bonus

**Category:** Biology

**Question Format:** Short Answer

**Question:**

What helps slow-moving bony fish achieve neutral buoyancy?

**Correct Answer: Swim Bladder**

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Buzzer Question

**Question Type:** Toss-up

**Category:** Biology

**Question Format:** Multiple Choice

**Question:**

The microbial loop is:

**Answer W:**

a type of food chain involving bacteria and protozoan grazing,

**Answer X:**

a type of food chain fueled by detritus,

**Answer Y:**

instrument used for isolating microalgae in water waste treatment

**Answer Z:**

carbon cycling between chloroplast and cytoplasm

**Correct Answer: W**

Buzzer Question

**Question Type:** Bonus

**Category:** Biology

**Question Format:** Multiple Choice

**Question:**

Kelps have as an accessory pigment:

**Answer W:**

Laminarian

**Answer X:**

Fucoxanthin

**Answer Y:**

Peridinin

**Answer Z:**  
Alginic acid

**Correct Answer: X**

