

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Biology

Question Text:

How can you quickly determine the sex of most species of crabs?

Answer W:

External sex organs

Answer X:

Relative size of the pincher claws

Answer Y:

The shape of the abdominal plate

Answer Z:

The color of the eyes

Correct Answer:

Y

Question #: 0000000271

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 1

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Chemical

Question Text:

Lead-210 with a half-life of 22 years cannot be used to determine the sedimentation of deep-ocean sediments because:

Answer W:

its half-life is too short

Answer X:

its half-life is too long

Answer Y:

its concentration in these sediments is too high to measure

Answer Z:

its concentration in these sediments is too low to measure

Correct Answer:

W

Question #: 0000002942

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 2

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Geology

Question Text:

Which of the following was the basis of geologists' current estimate of the Earth's age?

Answer W:

Moon rocks and meteorites

Answer X:

Fossils

Answer Y:

Continental rocks

Answer Z:

Ocean floor rocks

Correct Answer:

W

Question #: 0000003068

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 3

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Physical

Question Text:

What do underwater earthquakes, landslides, volcanic eruptions, or explosions generate?

Answer W:

Freak waves

Answer X:

Whirlpools

Answer Y:

Tsunamis

Answer Z:

Eddies

Correct Answer:

Y

Question #: 0000003503

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 4

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Biology

Question Text:

Where does the band of coral reef development extend to higher latitudes?

Answer W:

Atlantic Ocean

Answer X:

Pacific Ocean

Answer Y:

The east side of all oceans

Answer Z:

The west side of all oceans

Correct Answer:

Z

Question #: 0000002872

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 5

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Chemical

Question Text:

How is organic matter produced in the ocean classified?

Answer W:

Allochthonous

Answer X:

Autochthonous

Answer Y:

Terrigenous

Answer Z:

Hydrogenous

Correct Answer:

X

Question #: 0000002945

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 6

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Physical

Question Text:

If someone drops a cork into the ocean, about 10km from shore, how long does it take for the cork to move to the shore?

Answer W:

A few hours

Answer X:

1 day

Answer Y:

1 week

Answer Z:

Maybe never

Correct Answer:

Z

Question #: 0000003093

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 7

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Social Sciences

Question Text:

Which man accomplished the first prevention of scurvy on his voyage?

Answer W:

Vasco da Gama

Answer X:

Nathaniel Palmer

Answer Y:

James Cook

Answer Z:

Ferdinand Magellan

Correct Answer:

Y

Question #: 0000003970

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 8

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Biology

Question Text:

What are the two best developed senses in cetaceans?

Answer W:

Sight and smell

Answer X:

Taste and hearing

Answer Y:

Taste and smell

Answer Z:

Sight and hearing

Correct Answer:

Z

Question #: 0000002901

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 9

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Technology

Question Text:

What commercial fishing method utilizes multiple baited hooks, suspended beneath the ocean surface?

Answer W:

Trolling

Answer X:

Trawling

Answer Y:

Seining

Answer Z:

Longlining

Correct Answer:

Z

Question #: 0000003669

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 10

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Physical

Question Text:

What happens to the speed of sound when there is an increase in temperature, pressure, or salinity?

Answer W:

Increases

Answer X:

Decreases

Answer Y:

Remains the same

Answer Z:

Increases or decreases depending on factors more influential than temperature, pressure, and salinity

Correct Answer:

W

Question #: 0000003509

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 11

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Chemical

Question Text:

What type of reaction is cellular respiration considered?

Answer W:

Endothermic

Answer X:

Catalytic

Answer Y:

Inorganic

Answer Z:

Exothermic

Correct Answer:

Z

Question #: 0000002948

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 12

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Geography

Question Text:

What is the world's largest reef complex?

Answer W:

Florida Keys Reef Tract

Answer X:

Australian Great Barrier Reef

Answer Y:

Belize Barrier Reef

Answer Z:

Palau Reef Tract

Correct Answer:

X

Question #: 0000003057

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 13

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Biology

Question Text:

What is primary productivity a measure of?

Answer W:

Standing crop

Answer X:

Life expectancy

Answer Y:

Rate of birth minus rate of death

Answer Z:

Rate of production of organic carbon

Correct Answer:

Z

Question #: 0000002879

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 14

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Physical

Question Text:

Which best describes the behavior of high-energy waves of winter storms?

Answer W:

Move sand from offshore bars onto the beach

Answer X:

Move sand from the beach out to offshore bars

Answer Y:

Build up sand spits and tombolos

Answer Z:

Hold sand on the beach and keep the beach stable

Correct Answer:

X

Question #: 0000003150

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 15

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Geology

Question Text:

Which of the following is NOT a clay mineral found in marine sediments?

Answer W:

Chlorite

Answer X:

Illite

Answer Y:

Muscovite

Answer Z:

Kaolinite

Correct Answer:

Y

Question #: 0000003073

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 16

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Chemical

Question Text:

What is the average salinity of the world's oceans?

Answer W:

10

Answer X:

25

Answer Y:

35

Answer Z:

50

Correct Answer:

Y

Question #: 0000002954

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 17

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Biology

Question Text:

Which of the following organisms does NOT accumulate calcium carbonate?

Answer W:

Coccolithophores

Answer X:

Pteropods

Answer Y:

Foraminifera

Answer Z:

Cladocera

Correct Answer:

Z

Question #: 0000002881

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 18

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Social Sciences

Question Text:

Which of the following is the greatest threat to most dune plants?

Answer W:

Human traffic

Answer X:

Hot summer temperatures

Answer Y:

Wind blown sand

Answer Z:

Salt spray

Correct Answer:

W

Question #: 0000003975

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 19

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Biology

Question Text:

Which wavelength of light could deep-sea animals most likely detect with their eyes?

Answer W:

Infrared

Answer X:

Visible light

Answer Y:

Ultraviolet

Answer Z:

Gamma rays

Correct Answer:

W

Question #: 0000002912

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 20

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Chemical

Question Text:

Which type of heat changes the state of a substance, but does not raise its temperature?

Answer W:

Transforming heat

Answer X:

Sensible heat

Answer Y:

Latent heat

Answer Z:

Converting heat

Correct Answer:

Y

Question #: 0000002956

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 21

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Geology

Question Text:

Which compelling piece of evidence supported the theory of seafloor spreading?

Answer W:

The discovery and mapping of magnetic stripes on the seafloor

Answer X:

The discovery of deep earthquakes along the Pacific Rim by Charles Richter

Answer Y:

The recordings of submarine volcanic activity along mid-ocean ridges in the 1970s

Answer Z:

Sir Edward Bullard's geographic fit of the continents

Correct Answer:

W

Question #: 0000003079

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 22

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Biology

Question Text:

Which stimuli result in adaptations such as vertical migration and countershading in marine life?

Answer W:

Light

Answer X:

Pressure

Answer Y:

Temperature

Answer Z:

Salinity

Correct Answer:

W

Question #: 0000002883

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 23

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Physical

Question Text:

Which natural phenomenon does not cause a tsunami?

Answer W:

Earthquake

Answer X:

Volcanic eruption

Answer Y:

Landslide

Answer Z:

Tide

Correct Answer:

Z

Question #: 0000003094

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 24

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Geography

Question Text:

From what does the Sargasso Sea, located within the North Atlantic gyre, gets its name?

Answer W:

A Portuguese word for 'warm water'

Answer X:

A type of seaweed that is common there

Answer Y:

A Norse word for 'calm seas'

Answer Z:

The unusual clarity of its waters

Correct Answer:

X

Question #: 0000003600

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 25

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Chemical

Question Text:

How does increasing atmospheric pressure affect the boiling point of water?

Answer W:

The boiling point decreases

Answer X:

The boiling point does not change

Answer Y:

The boiling point increases

Answer Z:

Water does not boil at higher pressures

Correct Answer:

Y

Question #: 0000002960

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 26

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Biology

Question Text:

Where does primary production by marine plants occur?

Answer W:

occurs at all depths

Answer X:

is limited to the upper 200 meters of the sea

Answer Y:

is limited to the aphotic zone

Answer Z:

occurs below the compensation depth only

Correct Answer:

X

Question #: 0000002884

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 27

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Geology

Question Text:

What area did Project FAMOUS explore?

Answer W:

Atlantic and Pacific Oceans

Answer X:

Indian Ocean abyssal plain

Answer Y:

East Pacific Rise

Answer Z:

Mid-Atlantic Ridge rift valley

Correct Answer:

Z

Question #: 0000003076

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 28

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Physical

Question Text:

What is the speed of a wave equal to?

Answer W:

Height of the wave divided by the period

Answer X:

Amplitude divided by the wavelength

Answer Y:

Wavelength divided by the frequency

Answer Z:

Wavelength divided by the period

Correct Answer:

Z

Question #: 0000003152

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 29

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Geology

Question Text:

Where does the relative motion of a transform fault occur?

Answer W:

Outside the adjacent ridge axes

Answer X:

West of the adjacent ridge axes

Answer Y:

Between the adjacent ridge axes

Answer Z:

East of the adjacent ridge axes

Correct Answer:

Y

Question #: 0000003078

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 30

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Biology

Question Text:

Which of the following is the cause of red tides?

Answer W:

Planktonic bloom of red-colored microorganisms

Answer X:

Excess of iron compounds in the water

Answer Y:

Photosynthesis, combining carbon and water in sunlight

Answer Z:

Organic dyes emitted by nudibranchs and neustonic organisms

Correct Answer:

W

Question #: 0000002885

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 31

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Physical

Question Text:

Which characteristic does not describe a tsunami?

Answer W:

It can pass across the deep ocean without being noticed.

Answer X:

It can be a few meters high with a length extending over 750 kilometers in the deep ocean.

Answer Y:

It can propagate at a speed exceeding 700 kilometers per hour in the deep ocean

Answer Z:

It is dangerous when one encounters a tsunami in the deep ocean

Correct Answer:

Z

Question #: 0000003095

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 32

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Geology

Question Text:

Which of the following would be used to show the relationship between the height of the land and the depths of the ocean basins?

Answer W:

Hypsographic (hip-soh-gra-fic) curve

Answer X:

Hypsometric diagram

Answer Y:

Mercator projection

Answer Z:

Elevation matrix

Correct Answer:

W

Question #: 0000003324

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 33

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Geography

Question Text:

At which latitude is there the most ocean and least amount of land present?

Answer W:

60 degrees South

Answer X:

90 degrees South

Answer Y:

30 degrees North

Answer Z:

60 degrees North

Correct Answer:

W

Question #: 0000003310

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 34

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Biology

Question Text:

In which suborder are slow swimming whales, which also lack teeth, classified?

Answer W:

Odontoceti

Answer X:

Cetacea

Answer Y:

Mysticeti

Answer Z:

Orcinae

Correct Answer:

Y

Question #: 0000002886

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 35

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Social Sciences

Question Text:

Which ocean-related disaster caused the greatest loss of life in US history?

Answer W:

Hurricane Andrew of 1992

Answer X:

The Johnstown Flood of 1889

Answer Y:

The Galveston Hurricane of 1900

Answer Z:

The San Francisco Earthquake of 1906

Correct Answer:

Y

Question #: 0000003836

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 36

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Geology

Question Text:

What type of deposits are formed by conditions no longer existing in that area?

Answer W:

Relict sediments

Answer X:

Anomalous sediments

Answer Y:

Defunct sediments

Answer Z:

Derivative sediments

Correct Answer:

W

Question #: 0000004825

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 37

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Physical

Question Text:

Which of the following will result in an increase in the speed of sound transmission in ocean water?

Answer W:

Increased temperature

Answer X:

Decreased salinity

Answer Y:

Decreased pressure

Answer Z:

Increased turbulence

Correct Answer:

W

Question #: 0000003099

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 38

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Biology

Question Text:

Which is an example of a neritic environment?

Answer W:

An estuary

Answer X:

The sedimentary surface of the seafloor

Answer Y:

Coastal ocean waters

Answer Z:

The surface waters of the Great Lakes

Correct Answer:

Y

Question #: 0000002887

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 39

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Geology

Question Text:

When does the higher berm on a beach form?

Answer W:

During neap tides

Answer X:

During the summer in times of low energy waves

Answer Y:

During winter conditions

Answer Z:

During high wave conditions at low tide

Correct Answer:

Y

Question #: 0000003314

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 40

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Chemical

Question Text:

Generally, what are conservative elements in seawater?

Answer W:

Major components

Answer X:

Minor components

Answer Y:

Easily dissolved

Answer Z:

Used in photosynthetic activity

Correct Answer:

W

Question #: 0000002965

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 41

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Technology

Question Text:

Which of these oceanographic vehicles is the only autonomous vehicle?

Answer W:

ALVIN

Answer X:

NR-1

Answer Y:

ABE

Answer Z:

NAUTILE

Correct Answer:

Y

Question #: 0000003543

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 42

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Biology

Question Text:

Which of the following is the result of the oxidation of organic matter in sediments?

Answer W:

Loss of clay particles

Answer X:

Consumption of oxygen

Answer Y:

Production of oxygen

Answer Z:

Hydrothermal vent activity

Correct Answer:

X

Question #: 0000002888

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 43

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Social Sciences

Question Text:

Which submarine first traveled under the ice pack?

Answer W:

USS Nautilus in 1932

Answer X:

USS Nautilus in 1958

Answer Y:

USS Skate in 1958

Answer Z:

USS Seadragon in 1960

Correct Answer:

X

Question #: 0000003835

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 44

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Geology

Question Text:

Approximately, when did the North America began to separate from Europe?

Answer W:

10 million years ago

Answer X:

50 million years ago

Answer Y:

200 million years ago

Answer Z:

1 billion years ago

Correct Answer:

Y

Question #: 0000003070

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 45

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Biology

Question Text:

What is the most important source of nutrients for phytoplankton in the open ocean?

Answer W:

Salt fingers

Answer X:

Upwelling

Answer Y:

Photic zone recycling

Answer Z:

Mixing by internal waves

Correct Answer:

Y

Question #: 0000002892

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 46

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Geography

Question Text:

What was a major flaw in the 150AD maps drawn by Ptolemy?

Answer W:

Distortion of surface currents in the Mediterranean

Answer X:

Distortion of distance with longitude

Answer Y:

Distortion of distance with latitude

Answer Z:

Distortion of topographic features

Correct Answer:

X

Question #: 0000003464

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 47

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Chemical

Question Text:

What does the Law of Constancy of Composition state?

Answer W:

The relative proportion of ions and their concentrations are virtually constant

Answer X:

The relative proportions of ions are virtually constant, but their concentrations may vary

Answer Y:

Changes in salinity will result in changes in the ionic concentration

Answer Z:

Ionic concentrations remain fairly constant regardless of the local environmental conditions

Correct Answer:

X

Question #: 0000002967

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 48

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Physical

Question Text:

What is the name for the point at which the moon is farthest away from the Earth during its orbit?

Answer W:

Perigee

Answer X:

Apogee

Answer Y:

Neap

Answer Z:

Equinox

Correct Answer:

X

Question #: 0000003101

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 49

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Biology

Question Text:

What type of symbiotic relationship exists between zooxanthellae and coral?

Answer W:

Parasitism

Answer X:

Mutualism

Answer Y:

Commensalism

Answer Z:

Amensalism

Correct Answer:

X

Question #: 0000002893

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 50

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Physical

Question Text:

Which of the following is NOT TRUE about Langmuir circulation?

Answer W:

It is produced by the wind

Answer X:

It was first observed in the Sargasso Sea

Answer Y:

It occurs only where there is coastal upwelling

Answer Z:

It results in streaks of foam and debris along the surface of the ocean

Correct Answer:

Y

Question #: 0000003106

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 51

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Technology

Question Text:

Which of the following resulted in the production of an accurate map of the ocean floor?

Answer W:

Enough soundings using a weight had been made

Answer X:

Sound waves were discovered in water

Answer Y:

Echo sounding was developed

Answer Z:

Oceanographers used sound to locate submarines

Correct Answer:

Y

Question #: 0000003667

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 52

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Chemical

Question Text:

What is the salinity range where you would find the turbidity maximum in an estuary?

Answer W:

1 to 5 ppm.

Answer X:

5 to 15 ppm.

Answer Y:

15 to 25 ppm.

Answer Z:

25 to 35 ppm.

Correct Answer:

W

Question #: 0000002962

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 53

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Geology

Question Text:

What type of plate is the San Andreas fault?

Answer W:

Convergent plate boundary

Answer X:

Divergent plate boundary

Answer Y:

Transform plate boundary

Answer Z:

Transcurrent plate boundary

Correct Answer:

Y

Question #: 0000003476

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 54

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Physical

Question Text:

Which of the following is an implication of surface divergence?

Answer W:

Horizontal mixing must occur as a consequence

Answer X:

Biological productivity will decrease

Answer Y:

Vertical circulation must occur as a consequence

Answer Z:

Productivity remains constant

Correct Answer:

Y

Question #: 0000003525

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 55

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Biology

Question Text:

What is an autotroph?

Answer W:

A generator of its own food

Answer X:

A producer of reduced carbon

Answer Y:

A consumer of plants

Answer Z:

A consumer of animals

Correct Answer:

W

Question #: 0000002895

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 56

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Chemical

Question Text:

In methane hydrates, what traps the methane gas?

Answer W:

Carbon dioxide

Answer X:

Water

Answer Y:

Argon

Answer Z:

Oxygen

Correct Answer:

X

Question #: 0000002963

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 57

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Geography

Question Text:

What is your latitudinal position at dusk when the smallest angle between the horizon and the North Star (Polaris) is 22 degrees?

Answer W:

44 degrees N

Answer X:

78 degrees N

Answer Y:

46 degrees N

Answer Z:

22 degrees N

Correct Answer:

Z

Question #: 0000003603

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 58

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Social Sciences

Question Text:

Which of the following is prohibited in US marine sanctuaries?

Answer W:

Swimming

Answer X:

Fishing

Answer Y:

Dredging

Answer Z:

Shipping

Correct Answer:

Y

Question #: 0000003832

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 59

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Physical

Question Text:

Which of the following best defines the wavelength of a wave?

Answer W:

It is the distance from crest to trough measured horizontally

Answer X:

It is the distance from crest to trough measured vertically

Answer Y:

It is the time it takes for two troughs to pass a stationary point

Answer Z:

It is the smallest distance between two crests.

Correct Answer:

Z

Question #: 0000003151

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 60

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Geology

Question Text:

Where is the feature called the Moho situated?

Answer W:

Within the asthenosphere

Answer X:

Beneath the asthenosphere

Answer Y:

Within the lithosphere

Answer Z:

Between the lithosphere and the asthenosphere

Correct Answer:

Y

Question #: 0000003322

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 61

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Physical

Question Text:

Which of the following results in the high speed of sound in bottom ocean waters?

Answer W:

Low salinity

Answer X:

High temperature

Answer Y:

Low pressure

Answer Z:

Increased density and pressure

Correct Answer:

Z

Question #: 0000003507

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 62

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Social Sciences

Question Text:

Who first developed the concepts of latitude and longitude?

Answer W:

Eratosthenes (Ee-ra-tos-ten-nees)

Answer X:

Pythagorus

Answer Y:

Ptolemy

Answer Z:

Prince Henry the Navigator

Correct Answer:

W

Question #: 0000003214

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 63

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Chemical

Question Text:

What does a chemical equation with a negative delta G indicate?

Answer W:

Releasing energy and not spontaneous

Answer X:

Endothermic and spontaneous

Answer Y:

Exothermic and may be spontaneous

Answer Z:

Using energy and not spontaneous

Correct Answer:

Y

Question #: 0000002957

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 64

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Geography

Question Text:

Near which city is the US National Hurricane Center located?

Answer W:

Cape Canaveral

Answer X:

Houston

Answer Y:

Miami

Answer Z:

Tampa

Correct Answer:

Y

Question #: 0000003599

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 65

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Biology

Question Text:

What is the carbon source for marine autotrophic organisms?

Answer W:

Inorganic carbon.

Answer X:

Phytoplankton.

Answer Y:

Dissolved organic carbon.

Answer Z:

Particulate organic carbon.

Correct Answer:

W

Question #: 0000002909

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 66

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Physical

Question Text:

What is the sum of planetary and relative vorticity known as?

Answer W:

Absolute vorticity

Answer X:

Momentum vorticity

Answer Y:

Positive vorticity

Answer Z:

Wind vorticity

Correct Answer:

W

Question #: 0000003131

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 67

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Geology

Question Text:

Which of the following is NOT a scientific classification of a coral reef type?

Answer W:

Fringing reef

Answer X:

Nearshore reef

Answer Y:

Barrier reef

Answer Z:

Atoll reef

Correct Answer:

X

Question #: 0000003493

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 68

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Chemical

Question Text:

Which three factors are responsible for hypoxic zones in the northern Gulf of Mexico?

Answer W:

Pesticide-laden runoff, high winds, and strong currents

Answer X:

Coastal erosion, sedimentation, and spring overturn

Answer Y:

High river runoff, vertical stratification, and high biological oxygen demand

Answer Z:

Vessel sewage discharges, nutrient elevation, and upwelling

Correct Answer:

Y

Question #: 0000002946

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 69

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Physical

Question Text:

Which name is given to the wind band between the horse latitudes and the doldrums in the Southern Hemisphere?

Answer W:

Prevailing westerlies

Answer X:

Northeast trade winds

Answer Y:

Southeast trade winds

Answer Z:

Polar easterlies

Correct Answer:

Y

Question #: 0000003351

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 70

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Technology

Question Text:

What device can be used to map sixty kilometer wide strips of ocean floor?

Answer W:

Side-scanning sonar systems

Answer X:

Echo sounders

Answer Y:

Explosion seismic surveys

Answer Z:

Altimeter remote sensing routines

Correct Answer:

W

Question #: 0000003199

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 71

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Biology

Question Text:

Which marine mammal is known to use tools?

Answer W:

Beluga whale

Answer X:

White dolphin

Answer Y:

Manatee

Answer Z:

Sea otter

Correct Answer:

Z

Question #: 0000002896

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 72

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Geography

Question Text:

What is a geoid?

Answer W:

An oblate spheroid

Answer X:

A sphere with an envelope of fluids

Answer Y:

A rotating sphere

Answer Z:

The shape of the earth

Correct Answer:

Z

Question #: 0000003049

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 73

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Chemical

Question Text:

Which of the following primarily causes the variation in the salinity of seawater?

Answer W:

Carbon dioxide

Answer X:

Sodium ions

Answer Y:

Chloride ions

Answer Z:

Water molecules

Correct Answer:

Z

Question #: 0000002953

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 74

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Geology

Question Text:

Which of the following is NOT a type of marine phytoplankton that makes up a major portion of marine sediments?

Answer W:

Dinoflagellates

Answer X:

Diatoms

Answer Y:

Coccolithophorids

Answer Z:

Radiolarians

Correct Answer:

W

Question #: 0000003059

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 75

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Social Sciences

Question Text:

Which activity has the least impact on seagrass communities?

Answer W:

Overharvesting

Answer X:

Watershed development

Answer Y:

Boating

Answer Z:

Fertilizing farmlands

Correct Answer:

W

Question #: 0000003195

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 76

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Physical

Question Text:

What is the depth of the water a shallow-water wave is traveling in, by definition?

Answer W:

Less than one-twentieth of the wavelength

Answer X:

Less than one-half of the wavelength

Answer Y:

Less than the wavelength

Answer Z:

Less than twice the wavelength

Correct Answer:

W

Question #: 0000003153

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 77

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Chemical

Question Text:

What is the most abundant excess volatile on Earth?

Answer W:

carbon dioxide

Answer X:

water vapor

Answer Y:

chlorine

Answer Z:

nitrogen

Correct Answer:

X

Question #: 0000002968

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 78

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Biology

Question Text:

Which organism reproduces by shedding gametes into the sea, then depending upon the chance union of egg and sperm?

Answer W:

Blue whale

Answer X:

Purple sea urchin

Answer Y:

Octopus

Answer Z:

Galatheid crab

Correct Answer:

X

Question #: 0000002898

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 79

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Technology

Question Text:

What does the gyroscopic compass do?

Answer W:

Calculates magnetic variation

Answer X:

Senses the earth's rotation and orients its axis of rotation parallel to the earth's axis of rotation

Answer Y:

Utilizes the relatively long term fixed positions of the stars

Answer Z:

Indicates latitude and longitude

Correct Answer:

X

Question #: 000003211

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 80

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Physical

Question Text:

What is a wind blowing from the northeast to the southwest called?

Answer W:

Northwest

Answer X:

Northerly

Answer Y:

Northeast

Answer Z:

Southwest

Correct Answer:

Y

Question #: 0000003514

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 81

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Chemical

Question Text:

Which two molecules increase in concentration in deep water as it travels from the North Atlantic to the North Pacific ocean?

Answer W:

Oxygen and nitrate

Answer X:

Nitrate and carbon dioxide

Answer Y:

Oxygen and carbon dioxide

Answer Z:

Carbon dioxide and carbon-14

Correct Answer:

X

Question #: 0000002944

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 82

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Technology

Question Text:

Which Navy-developed model will give a global analysis and forecast, out to 6 days, for significant wave height and direction?

Answer W:

NOGAPS (No-Gaps)

Answer X:

COAMPS (Co-Amps)

Answer Y:

WAM (wham)

Answer Z:

STWAVE (S-T-Wave)

Correct Answer:

Y

Question #: 0000003215

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 83

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Social Sciences

Question Text:

Who discovered that the White Cliffs of Dover contained layers of coccolithophorids?

Answer W:

Robert Hooke

Answer X:

Robert Brown

Answer Y:

Anton van Leeuwenhoek

Answer Z:

Camillio Golgi

Correct Answer:

Y

Question #: 0000003194

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 84

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Geology

Question Text:

What is the range of fine sand, on the Wentworth scale of particle size?

Answer W:

0.5 to 1 millimeter

Answer X:

0.25 to 0.5 millimeter

Answer Y:

0.125 to 0.25 millimeter

Answer Z:

0.05 to 0.125 millimeter

Correct Answer:

Y

Question #: 0000003084

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 85

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Geography

Question Text:

Exclusive Economic Zones cover what percent of the seafloor?

Answer W:

16 percent

Answer X:

24 percent

Answer Y:

36 percent

Answer Z:

52 percent

Correct Answer:

Y

Question #: 0000003051

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 86

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Chemical

Question Text:

What environmentally harmful isotope was produced during the 1954 'Bravo' thermonuclear detonation at Bikini Atoll?

Answer W:

Uranium 238

Answer X:

Nitrogen-15

Answer Y:

Cesium 137

Answer Z:

Carbon 14

Correct Answer:

Y

Question #: 0000002964

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 87

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Physical

Question Text:

What is the second largest reservoir, by volume, on the planet?

Answer W:

The atmosphere

Answer X:

Freshwater lakes

Answer Y:

Ice sheets and glaciers

Answer Z:

Groundwater

Correct Answer:

Y

Question #: 0000005004

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 88

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Technology

Question Text:

How does a Global Positioning System receiver calculate the distance to a GPS satellite?

Answer W:

By transmitting and receiving a radar signal aimed at the satellites

Answer X:

Using trigonometry and a radio direction finder aimed at multiple satellites

Answer Y:

By detecting the Doppler shifts in the satellite's transmission

Answer Z:

By receiving a time-stamped signal from the satellite.

Correct Answer:

Z

Question #: 0000003213

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 89

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Biology

Question Text:

Some coral colonies remove calcium carbonate from seawater and deposit it as limestone in the reef. What is the range of yearly accumulation of limestone in a typical square mile of a reef?

Answer W:

10 to 50 tons

Answer X:

100 to 150 tons

Answer Y:

4000 to 7000 tons

Answer Z:

100,000 to 500,000 tons

Correct Answer:

Z

Question #: 0000002900

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 90

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Physical

Question Text:

Which best describes the concept of hurricanes as heat transfer engines?

Answer W:

Transfer the sun's energy from temperate zones to polar zones.

Answer X:

Transfer the sun's energy from the tropics to temperate zones.

Answer Y:

Transfer the sun's energy from temperate zones to the tropics.

Answer Z:

Transfer the sun's energy from the northern to the southern hemispheres.

Correct Answer:

X

Question #: 0000005005

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 91

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Chemical

Question Text:

Why are chelators important to marine organisms?

Answer W:

They absorb sunlight

Answer X:

They bind trace metals

Answer Y:

They prevent sinking

Answer Z:

They enhance feeding

Correct Answer:

X

Question #: 0000002938

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 92

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Technology

Question Text:

What is ConShelf III?

Answer W:

A manned submersible

Answer X:

An underwater habitat

Answer Y:

A remotely operated vehicle

Answer Z:

An autonomous explorer

Correct Answer:

X

Question #: 0000003217

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 93

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Geology

Question Text:

What is an example of a hydrogenous sediment?

Answer W:

Manganese nodules

Answer X:

Calcareous oozes

Answer Y:

Siliceous oozes

Answer Z:

Brown Red clays

Correct Answer:

W

Question #: 0000004975

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 94

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Geography

Question Text:

What is the name of the strait between Australia and Tasmania?

Answer W:

Cook

Answer X:

Bass

Answer Y:

Torres

Answer Z:

Brisbane

Correct Answer:

X

Question #: 0000003053

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 95

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Physical

Question Text:

What is the name of the Eastern Boundary current in the South Atlantic?

Answer W:

West Wind Drift

Answer X:

South Equatorial Current

Answer Y:

Benguela Current

Answer Z:

Canary Current

Correct Answer:

Z

Question #: 000003105

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 96

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Biology

Question Text:

What type of organism is Antarctic krill?

Answer W:

Copepod

Answer X:

Salp

Answer Y:

Amphipod

Answer Z:

Euphausiid

Correct Answer:

Z

Question #: 0000002902

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 97

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Chemical

Question Text:

How many years does it take for an amount of water equal to the entire volume of the ocean to cycle through hydrothermal vents?

Answer W:

1000 years

Answer X:

100,000 years

Answer Y:

10 million years

Answer Z:

1 billion years

Correct Answer:

Y

Question #: 0000002941

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 98

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Geology

Question Text:

Which of the following is a component of siliceous ooze?

Answer W:

Foraminifers

Answer X:

Radiolarians

Answer Y:

Pteropods

Answer Z:

Coccolithophores

Correct Answer:

X

Question #: 0000003311

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 99

2016 Buzzer Question

Question Type: Toss-Up

Question Format: Multiple Choice

Category: Technology

Question Text:

The methods of electro dialysis, reverse osmosis, and ion exchange are used for which purpose?

Answer W:

Determining water salinity

Answer X:

Measuring current velocity

Answer Y:

Desalination

Answer Z:

Determining residence time

Correct Answer:

Y

Question #: 0000003200

Competition: Regional Competition 3

Round: sample toss-ups

Pair: 100