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		No. American
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	Multiple Choice	·
	Biological	
i Augustus	Corals are most closely related to ?	
Snaestura	A TOTAL SANCE OF CONTRACTOR OF THE PROPERTY OF	
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Answer W:	barnacles	
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Answer Z:	sea urchins	
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Correct Answer:	X	<u> </u>
	M ameri <u>a</u>	Special And Common Service Common Se

Physical

A humaning (hik-noh-kling) is a significant change in 9

Answer W: salinity

Answer X: density

Answer Y: light intensity

Answer Z: turbidity

Toss-up **Multiple Choice** Technology

Number 3

Question:

The draft of a ship is the ...?

Answer W: amount of water it displaces.

Answer X: depth of its cargo holds.

Answer Y:

number of tons of cargo it can carry.

Answer Z:

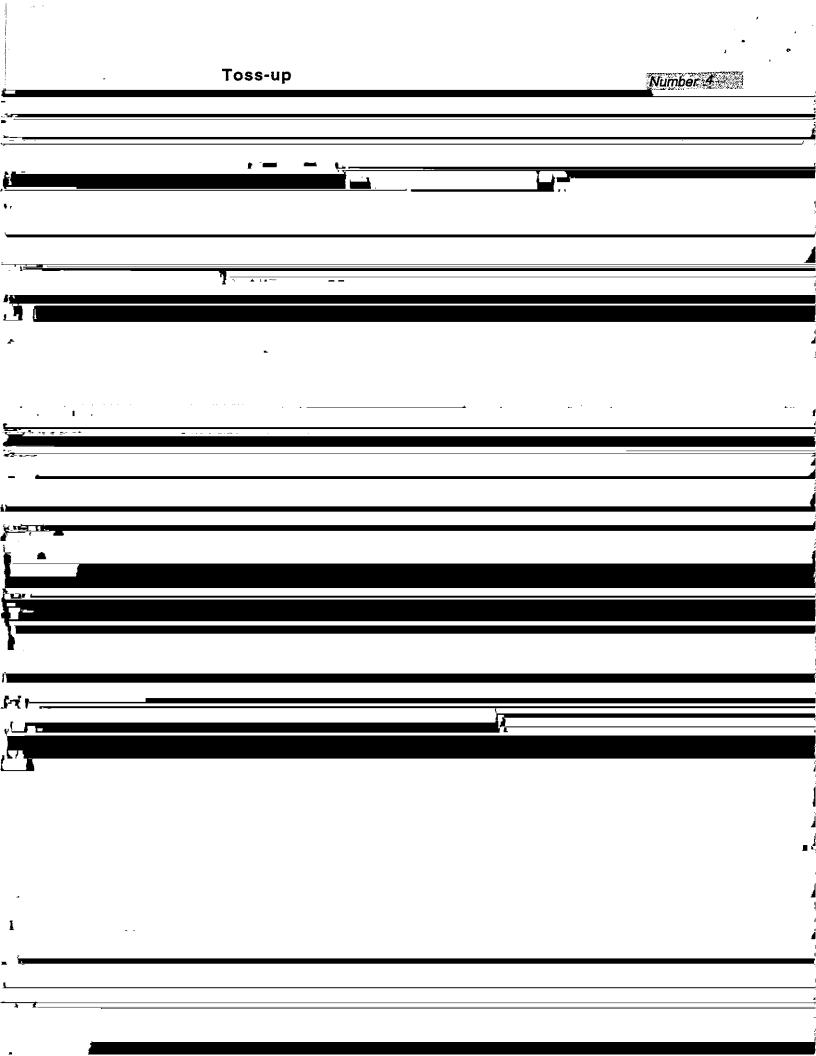
minimum depth of water in which it can float.

Correct Answer: Z

Bonus Multiple Choice Technology

Number 3





Geography

Question: At your location it is 1630 Greenwich Mean Time (1630Z) at local

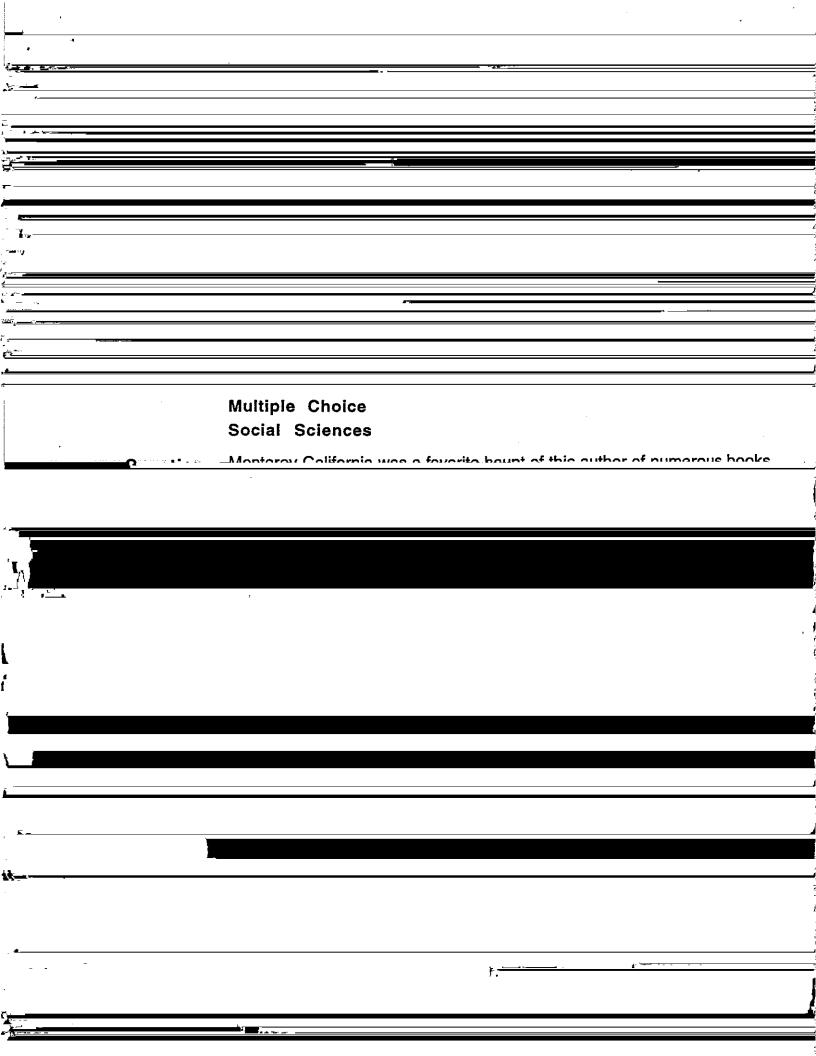
longitude?

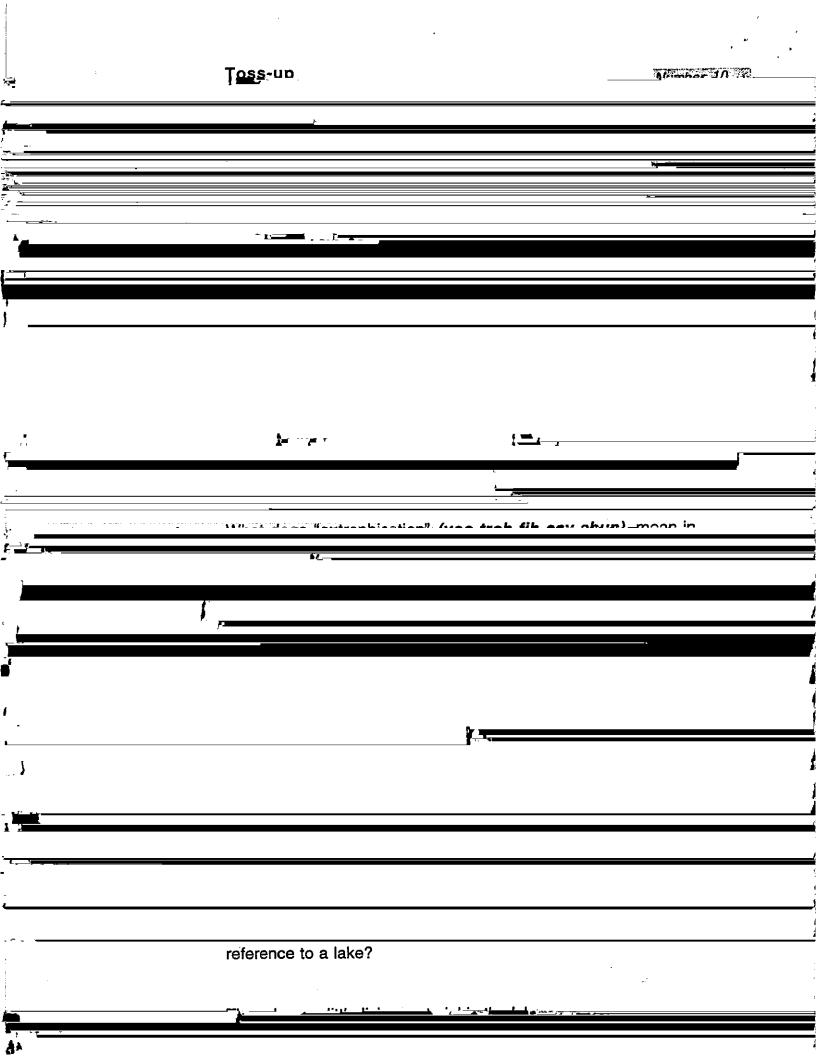
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	Question:	In temperat	te zones th	e thermocli	ne will be mo	ost pronour	ced during.	?
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	Answer X:	summer		•	•			
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	Answer Y:	fall						
	Auswei I:	1901						

Answer Z: winter

Answer W: digestive system

Answer X: skeletal system





Toss-up Multiple Choice Physical



Answer W: to cause the height to fluctuate in a regular pattern

Answer X: to decrease the height

Answer Y: to increase the height

Answer Z: to cause the height to fluctuate in an irregular pattern

Correct Answer: X

Bonus Multiple Choice Physical



Number 12 5

Number 12

Toss-up **Multiple Choice** Biological

Question: Kelp lacks ...?

Answer W:

a stipe

Answer X:

roots

Answer Z: a holdfast

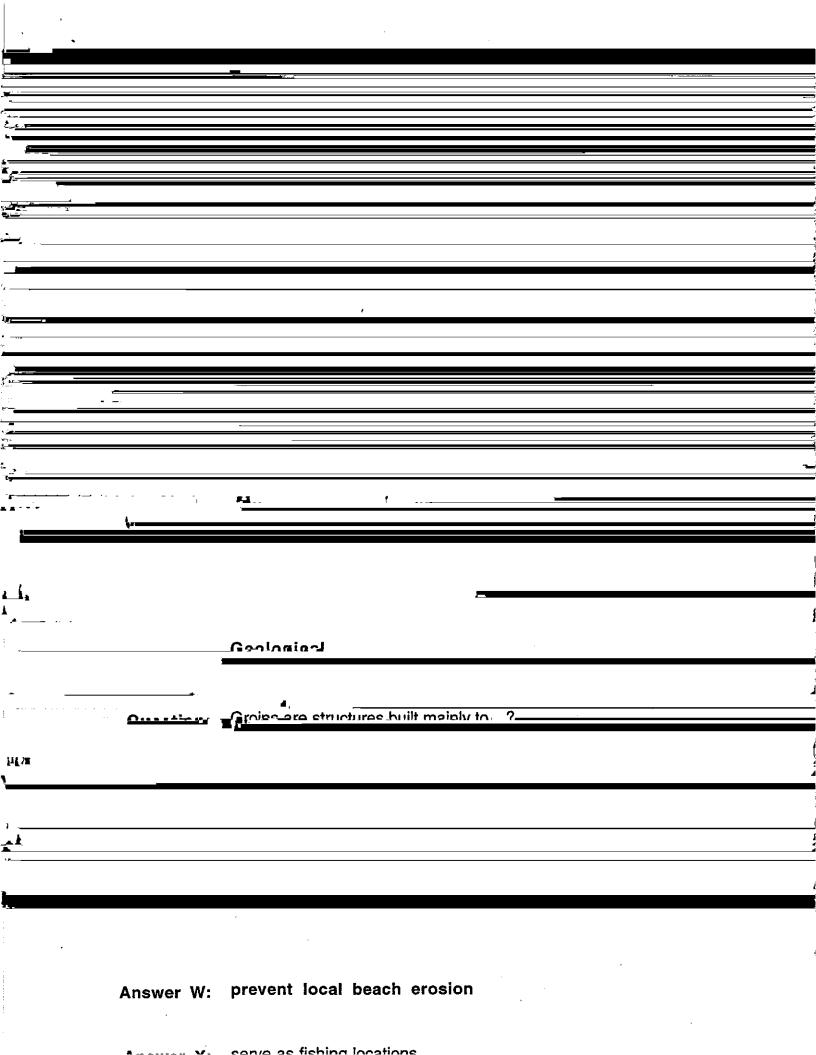
Correct Answer: X

Bonus

Short Answer Biological

Question:

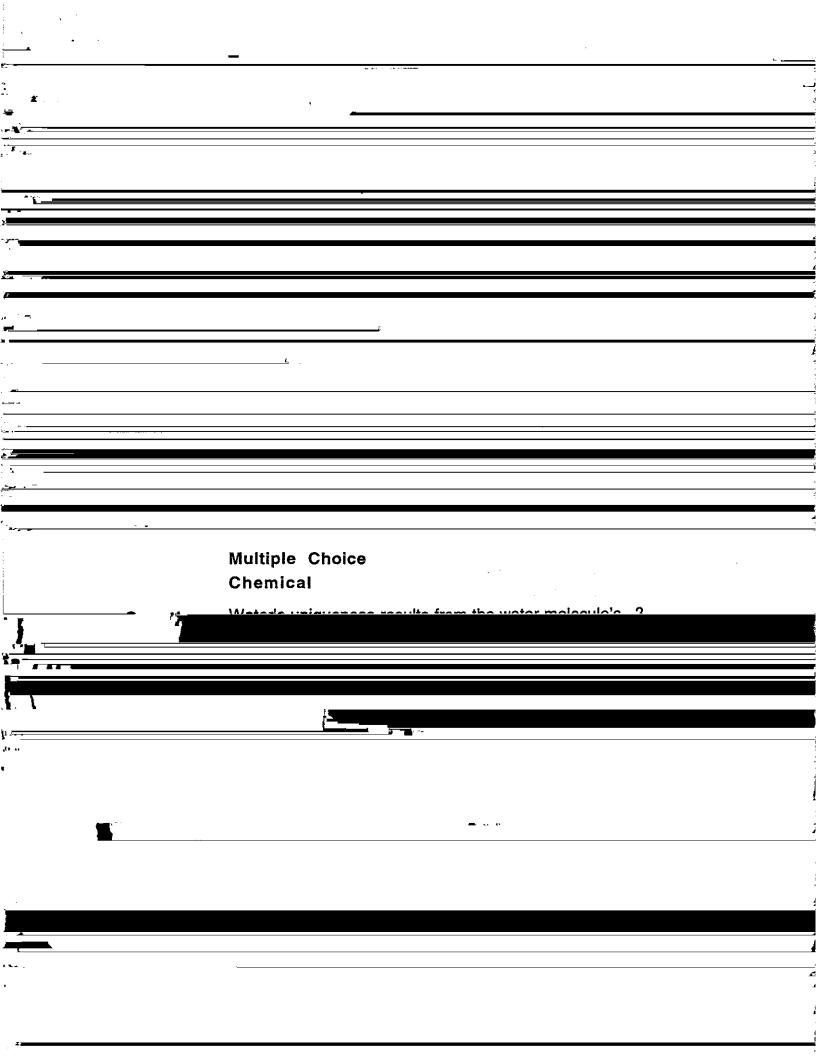
What are the two (2) major limiting factors controlling the vertical and

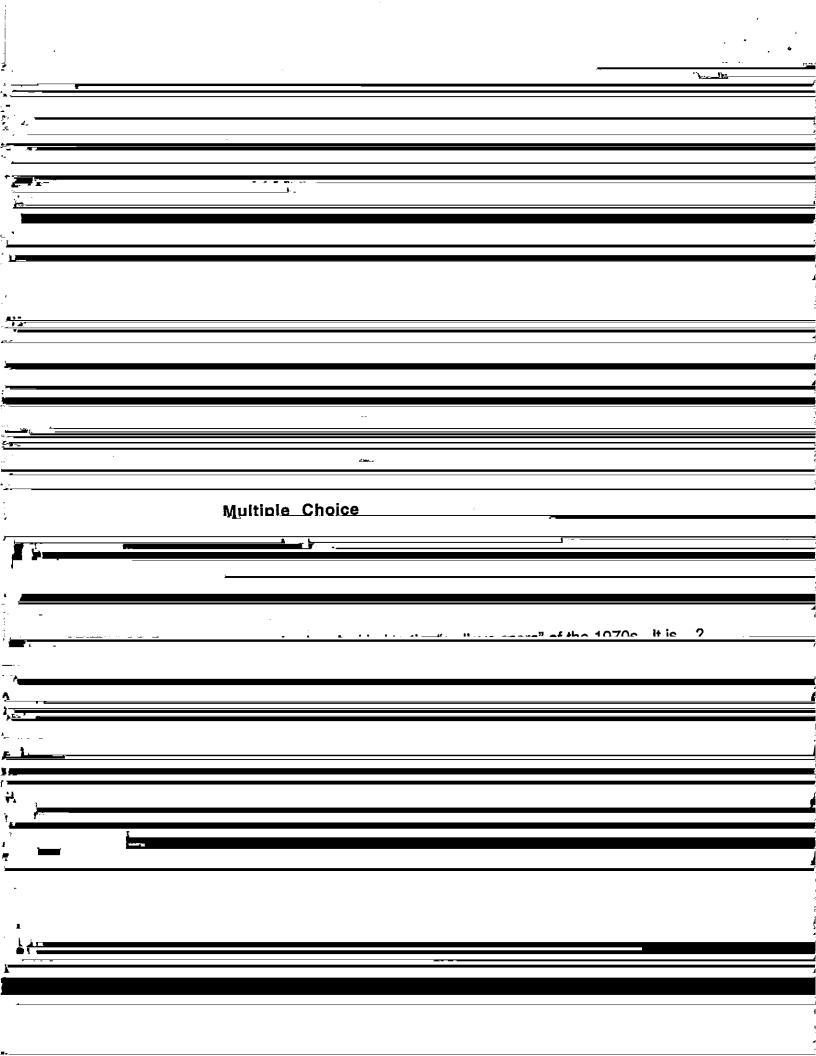


Number 14

Toss-up Multiple Choice Physical

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Toss-up Multiple Choice Technology

Number 17

	Technology		
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Toss-up
Multiple Choice
Righogical

Answer Z: sucker

Correct Answer: Y

Answer W: sculpin

Answer X: livebearer

Question: One likely result of El Niño is ...?

Answer X: flooding in Peru

increeding marine hird populations in Chance

Number 20 🔻

Geological

Question: What percent of the world's fresh surface water is contained in the Great

Lakes?

Answer W: 10

Answar VI 20

Answer Y: 50

Answer Z: 66

Correct Answer: X

Bonus

Multiple Choice

Geological

Question: The waters in areas with limestone bedrock are usually not heavily

Toss-up Multiple Choice Biological

Number 21

Question:

The non-indigenous fish species most often caught in Lake Michigan by

commercial fishermen is ...?

Answer W: ruffe (rough)

Answer X: salmon

Answer Y: alewife (ale-wife)

Answer Z: white perch

Correct Answer: Y

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Multiple Choice Chemical

Ottemio

Question: The energy represented by the latent heat of melting is being used to ...?

Answer W: raise the temperature of the ice

Answer X: raise the temperature of liquid water

Answer Y: break hydrogen bonds

Answer Z: break Van der Waals bonds

Correct Answer: Y

Bonus

Number 22

Multiple Choice

Chemical

Question: The latent heat of vaporization of water is higher than its latent heat of

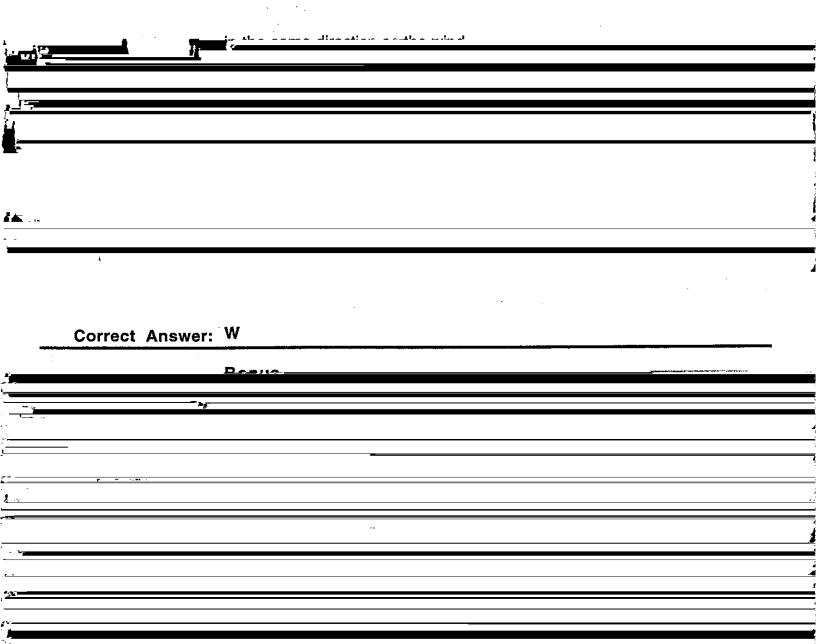
melting because ...?

Question: Ekman transport predicts that in the Northern Hemisphere water will

Answer W: to the right of the wind.

Answer X: to the left of the wind.

Answer Y: opposite to the wind.



	Toss-up	Number 24
) In	
	Multiple Choice Geological Lead-210-with a half-life of 22 years is used to determine the ra	ite of sediment
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Toss-up Multiple Choice Biological



Question:

The world's largest fish is a filter-feeder that depends on plankton as a

food source. This fish is the ...?

Answer X: Blue whale

Answer Y: Whale shark

Answer Z: Megamouth shark

Correct Answer: Y

Multiple_Chnics.

Physical

Question: During ebb current the level of the water along the shore ...?

Answer Y: fluctuates

Answer Z: is unchanged

Correct Answer: X

13 3 T

Toss-up Multiple Choice

Biological

Question: What is the term for the light-producing organs of bioluminescent

Number 27

Number, 27

organisms?



Answer X: photochromes

Answer Y: photophores

Answer Z: photoblasts

Correct Answer: Y

Bonus

Multiple Choice

Biological

What is the term used to describe examisms which are planktonic only in

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Toss-up Multiple Choice Chemical

Number 29

Question: An alkaline solution has a pH of?

Answer W: 7

Answer X: 9

Answer Y: 0

Answer Z: 4

Correct Answer: X

Bonus

Multiple Choice

Number 29 🛠

Multiple Choice Technology

Question: The chronometer developed by John Harrison was valuable because it made possible the accurate determination of ...?

Answer X: true north

Answer Y: inclination

tarius 7. longitude

Correct Answer: Z

Bonus

Number 30

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	Physical		
Question:	Salinity is expressed as?		
Answer W:	parts per thousand by weight		
Answer X:	parts per million by weight		
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Toss-up Multiple Choice Biological



Answer W: dinoflagellate

Answer X: diatom

Answer Y: bacteria

Answer Z: fungi

	Toss-up	Number 33
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Toss-up

Multiple Choice

Number 34

Social	Science

Question: The first Europeans known to have traveled to North America were the ...?

Answer W: Spanish

Answer X: Phoenicians

Answer Y: Portuguese

Answer Z: Vikings

Correct Answer: Z

<u>Annue</u>

Multiple Choice Social Sciences

Question: An usual voyage that attempted to reach the North Pole was initiated in

1893 aboard the vessel...?

Anauge 14. National

Toss-up Multiple Choice Physical



Question:

The greatest amount of heat loss from the world's ocean occurs

through...?

Answer W: ocean currents

Answer Y: radiation

Answer Z: evaporation

Correct Answer: Z

Toss-up Multiple Choice Chemical



Question: When carbon dioxide combines with ocean water, it produces ...?

Answer W: carbonate

Answer X: bicarbonate

Answer Y: carbonic acid

Answer Z: calcium carbonate

Correct Answer: X

Multiple Choice Chemical

Question: The "Rule of Constant Proportions" ...?

Toss-up Multiple Choice Geological



by a lagoon are called? Answer W: atolls Answer X: barrier reefs

Correct Answer: X

Answer Y:

Answer Z:

Bonus Multiple Choice Geological

fringing reefs

flat reefs



Toss-up Multiple Choice Physical Number 38

Answer W: at 0° C

Answer X: at 4° C

Answer V. at its freezing point

Number 39

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Social Sciences

Question: The theory of continental drift was first presented in 1912 by ...?

Answer W: Harry Hess

Answer X: Frederick Vine

Answer Y: Alfred Wegener (Veh'-geh-ner)

Answer Z: Sir Edward Bullard

Correct Answer: Y

Bonus

Multiple Choice

Social Sciences

Question: Benjamin Franklin's nephew, Timothy Folger, produced the first map of

the ...?

Answer W: North Atlantic Ocean

Answer X: Gulf Stream

Answer Y: Labrador Currents

Answer Z: U.S. Coastal Waters

Correct Answer: X

Number 40

Physical

The distance from crest to crest on adjacent wave forms is the ...? Question:

Answer W: wave height

Answer X: wavelength

Answer Y: steepness

wave period Answer Z:

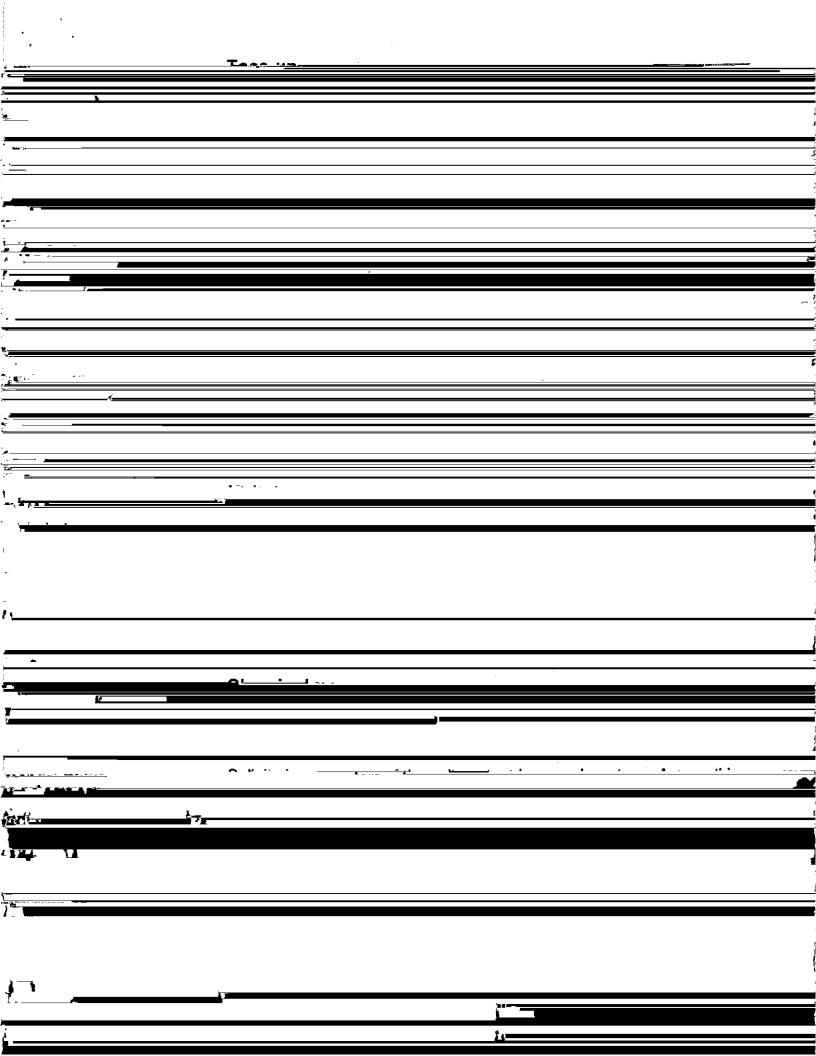
Correct Answer: X

Bonus

Multiple Choice

Physical

Particles move back and forth in the direction of energy transmission in a Question: madium that is transmitting this kind of wave. This kind of wave is called

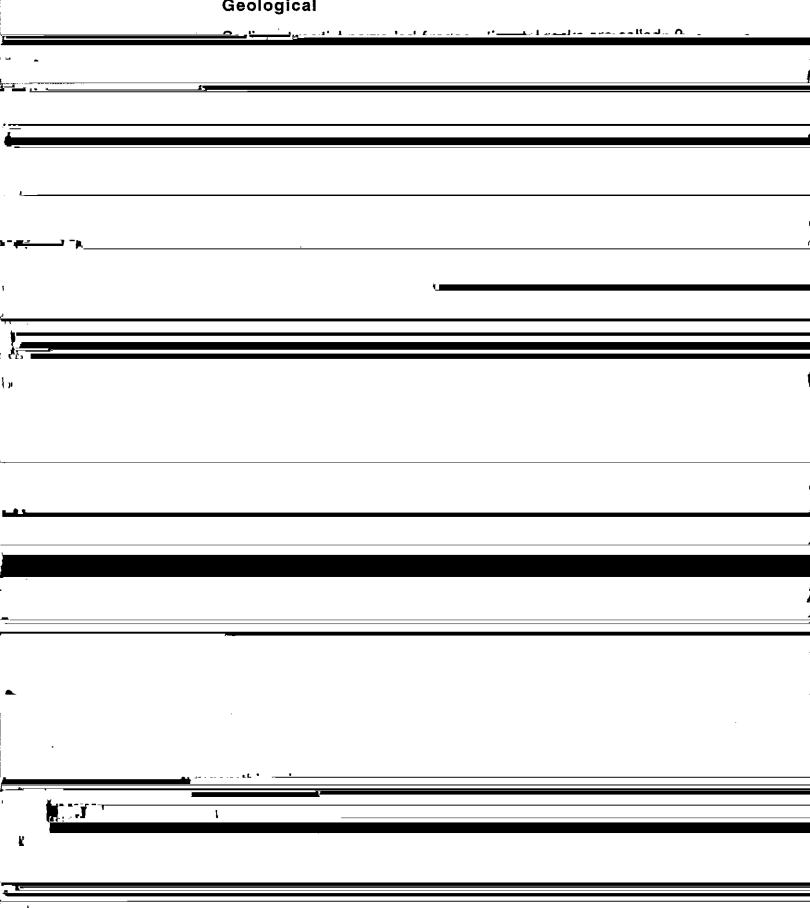


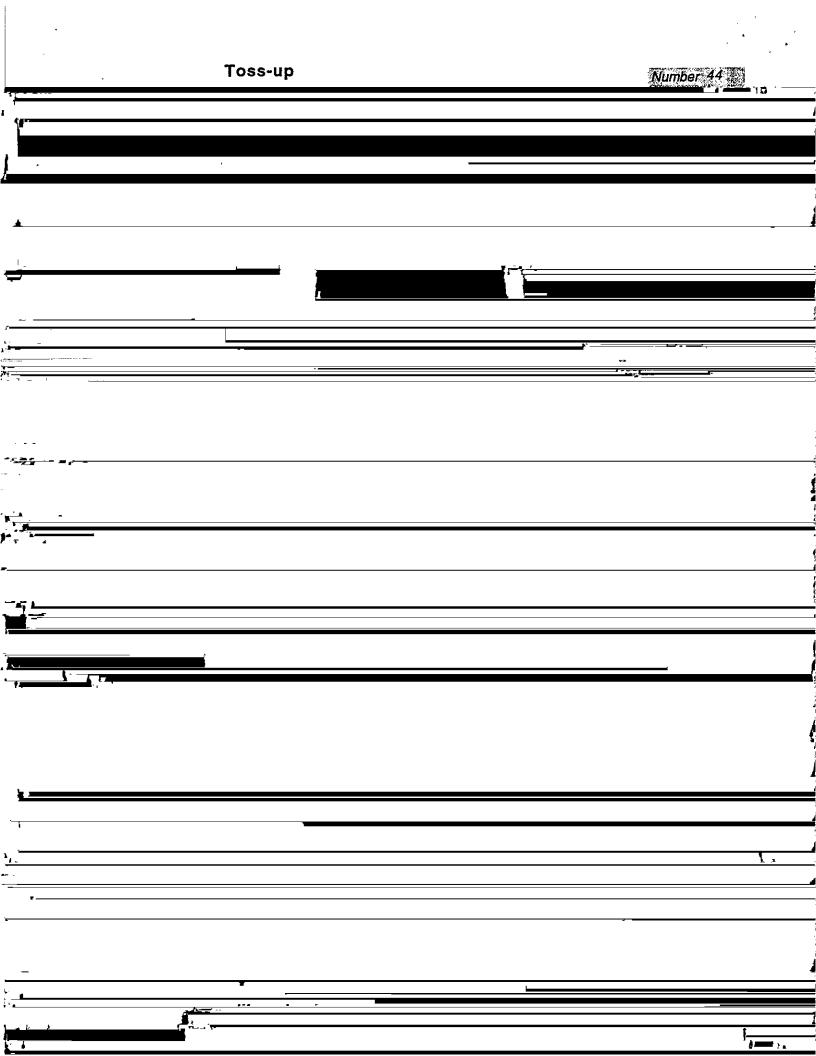
Answer X: wave velocity decreases

following does NOT occur? Answer W: wavelength decreases

Toss-up Multiple Choice Geological









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A tsunami is an example of a ...?

Answer W: deep-water wave

Answer X: shallow-water wave

Answer Y: forced wave

Answer Z: capillary wave

Correct Answer: X

Bonus

Number 45

Multiple Choice

Physical

Question: The interference pattern resulting from swell that is generated in different

locations coming together crest to crest (in phase) is...?

Answer W: reflective

Answer X: constructive

Answer Y: destructive

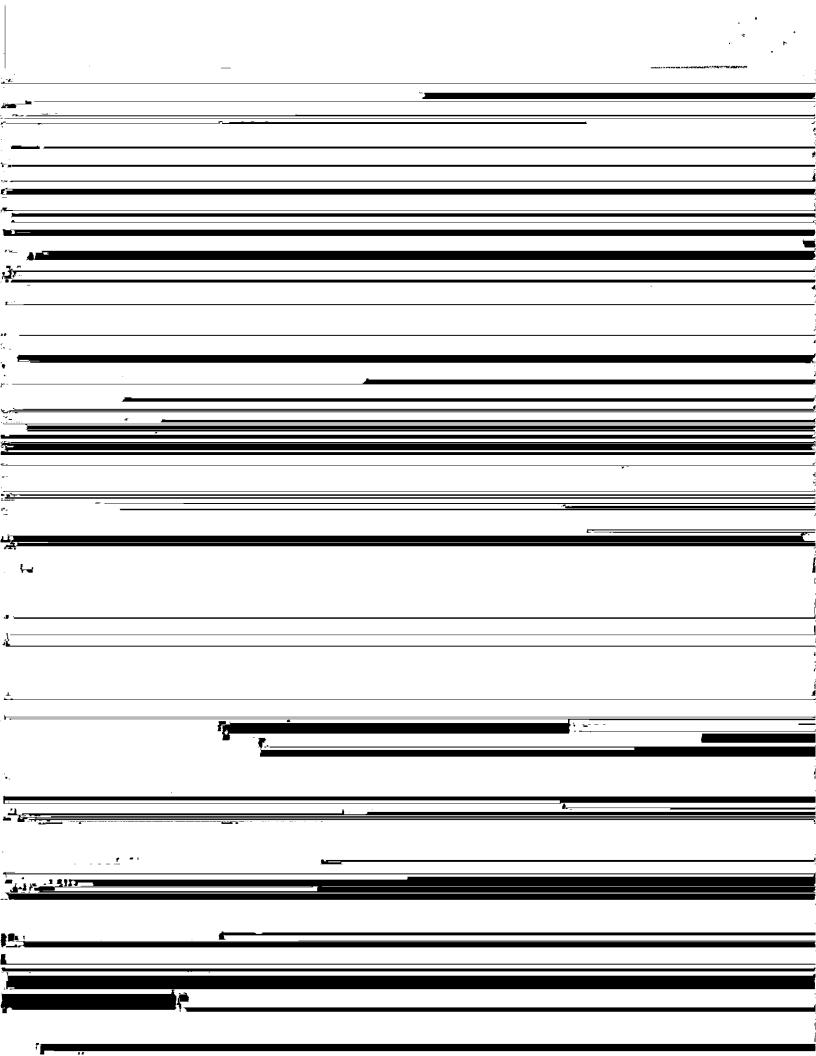
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	Question: Sponges belong to which of the following phyla?	
	Question: Sponges belong to which of the following physics	
	<u></u>	
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	Answer X: porifera	

Answer Y: echinodermata

Answer W: lithology of rock layers

Answer X: fossil content of rock layers

Answer Y: thickness of rock layers



Number 49

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Geological

Question: An example of a primary coast is a ...?

Answer W: volcanic coast

Answer X: wave-erosion coast

Answer Y: marine-deposition coast

Answer Z: coral-reef coast

Correct Answer: W

Bonus

Multiple Choice

Geological

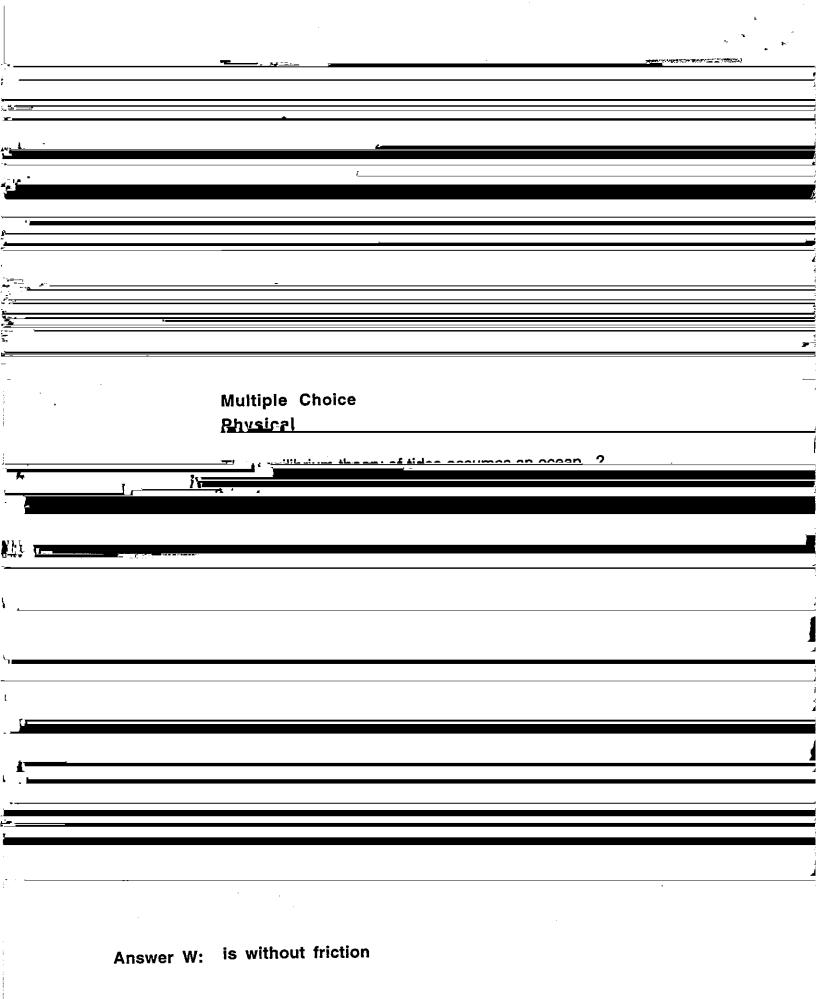
Question: Beach slope increases as beach sediment becomes...?

Answer W: more angular

Answer X: coarser

Answer Y: finer

Answer Z: none of the above



Answer X: lies in rectangular basins

Dissolved oxygen concentration, ml • 1 -1 NO_{3} - N, μg atoms \bullet I $^{-1}$ PO_{4} - P, μg atoms \bullet I $^{-1}$ Si, μg atoms \bullet I $^{-1}$ Density 0 10 20 30 40 0 10 20 30 40 0

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