

Student name _____

Test 3 - Form A
3370:200 Section 001
Fall 1997
Environmental Geology

READ THIS FIRST!!!!

NOTE:

Count pages to make sure that you have all of them.

Sign the question sheet and turn it in with your answer sheet.

Fill in all information requested on the answer sheet. You lose 2 points for each item not legibly filled in.

Test is over at 9:40 a.m.

There are 40 multiple choice questions. Each is worth 2.5 points. Total value of the test is 100 points.

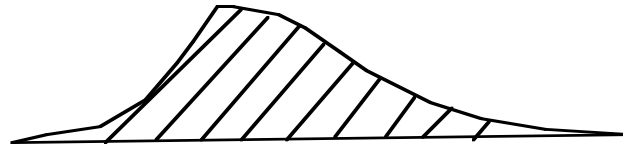
You may leave when you have completed the test, but please do so quietly in consideration for those who are still working. Bring your test to Mr. Bonar or me in the front of the room.

RELAX! If a question is unclear to you, please raise your hand.

For the 40 questions below (1 though 40) put your answer on the computer form. Each is worth 2 points

1. **If global warming were to occur, meaning that the average temperature rose worldwide, global sea levels would likely**
 - A. Rise
 - B. Fall
 - C. Stay constant
 - D. Can't tell from information given
2. **A beach is an erosional type shoreline.**
 - A. True
 - B. False
3. **A beach can be made of pebbles:**
 - A. True
 - B. False
4. **An area where salt and fresh water mix is called a**
 - A. Tsunami
 - B. Estuary
 - C. Monadnock
 - D. Sand spit
 - E. Loess
5. **You want to buy an industrial piece of real estate, which the Realtor has valued at \$125,000. You hire someone to conduct an environmental liability audit, and they find pollution that will cost \$75,000 to clean up. What is the value of the property?**
 - A. \$200,000
 - B. \$125,000
 - C. \$75,000
 - D. \$50,000
 - E. \$10,000
6. **The type of groundwater law, where the landowner has the absolute right to do whatever they want with their water is called:**
 - A. Riparian doctrine
 - B. Reasonable use doctrine
 - C. Doctrine of prior appropriation
 - D. Correlative rights doctrine.
 - E. Driller rights
7. **Antarctica is a desert**
 - A. True
 - B. False
8. **Desertification is caused by humans, and as we discussed in class, is occurring worldwide due to which of the following reasons?**
 - A. Overgrazing
 - B. Farming practices
 - C. Cutting brush for fuel
 - D. Off-road vehicle use
 - E. All of the above
9. **Deflation is a desert process that causes desert pavement. It is caused by...?**
 - A. Water
 - B. Wind
 - C. Cold temperatures
 - D. Hot temperatures
 - E. A & D

10. Below is a cross sectional drawing of a sand dune. The sloping lines indicate the cross-beds of the sand making up the dune. The shape of the dune, and the tilt of the cross beds, both indicate a wind that was blowing
- From left to right
 - From right to left



11. As we discussed in class, Cleveland Ohio was once buried under ice _____ thick.
- 10 feet
 - 100 feet
 - 1,000 feet
 - 1 mile
 - 10 miles
12. Which of the following is not considered to be a potential cause of glacier advances (or "ice-ages").
- Faulting
 - Volcanic eruptions
 - Changes in the earth's orbital path
 - Changes in the earth's axial precession (tilt)
 - Climate changes
13. Coal is a fossil fuel.
- True
 - False
14. Which of the following is considered a non-renewable energy source?
- Wood
 - Wind
 - The sun
 - Hydroelectric (Water)
 - None of the above, all are renewable.
15. Petroleum products are the largest source of energy used by humans.
- True
 - False
16. A 55 gallon drum of crude oil costs about _____ right now.
- 50 cents
 - \$1.20
 - \$3.50
 - \$12.00
 - \$24.00
17. Which is the highest grade of coal?
- Peat
 - Anthracite
 - Lignite
 - Bituminous
 - Sub-bituminous
18. What percentage of coal burned in the U.S. is for power generation?
- Less than 10%
 - 10 to 40%
 - 40 to 60%
 - 60 to 80%
 - More than 80%.

19. **Methane, chemical formula CH₄, is a hydrocarbon.**
A. True
B. False
20. **Which of the following is NOT an important use of petroleum that we talked about in class?**
A. Plastics
B. Energy
C. Insecticides
D. Synthetic fibers
E. Candy bars
21. **Oil forms in _____ rocks.**
A. Reservoir
B. Source
C. Cap
D. Shallow
22. **The first successful oil well in the world was drilled by Colonel Sanders, in Titusville, Pennsylvania, in 1958.**
A. Completely True
B. Not Completely True
23. **Tar sands and oil shales are economically and environmentally feasible energy sources at this time.**
A. True
B. False
24. **Solar power is the cheapest form of power**
A. True
B. False
25. **Hydroelectric power is clean and causes no known environmental problems**
A. True
B. False
26. **Nuclear energy supplies about _____ of U.S. power needs.**
A. 5%
B. 20%
C. 50%
27. **On a per capita basis, which of the following non-metallic resources do we use the most of?**
A. Cement
B. Crushed stone
C. Clays
D. Salt
E. Phosphate
28. **On a per capita basis, which of the following metallic resources do we use the most of?**
A. Copper
B. Iron & steel
C. Aluminum
D. Zinc
E. Lead
29. **In Cuyahoga Falls, how are the aluminum cans separated from the other cans ?**
A. By hand
B. By machine

30. **Iron occurs in the crust of the earth at an average concentration of 2%. In an ore deposit that is considered mineable, it occurs at a concentration of 20%. What is the concentration factor?**
A. 100
B. 20
C. 10
D. 4
E. Not enough information.
31. **A given mineral usually occurs in particular geologic settings.**
A. True
B. False
32. **Gold nodules are found on the deep ocean floor**
A. True
B. False
33. **Year that the gasoline internal combustion engine was invented?**
A. 1885
B. 1925
C. 1935
D. 1945
34. **Lakes such as Portage Lakes, Yellow Pond, and White Pond were formed by:**
A. Meteors
B. Ice
C. Erosion
D. Wind
35. **How many plastic milk jugs must be recycled to make one picnic table as shown in the video?**
A. 180
B. 1,800
C. 18,000
D. 180,000
E. 1,800,000
36. **Which of the following is NOT one of the three main methods of waste disposal:**
A. Isolation
B. Attenuation
C. Recycling
D. Liquifaction
37. **Which of the following is NOT generally a major problem with landfilling?**
A. Flooding
B. NIMBY
C. Stabilization
D. Gas generation
E. Leachate handling
38. **What percent of the original volume of a waste remains after incineration?**
A. 1%
B. 5%
C. 10%
D. 25%
E. 30%
39. **All plants extract nitrogen from the soil and groundwater (requiring either naturally rich soil, or fertilization)**
A. True
B. False
40. **How long to fill one landfill cell at the Lorain County, Ohio facility?**
A. 1 year
B. 2 years
C. 4 years