

Review for Test 1

ESC 115 Physical Geology

Fall, 2007

1. What parts of continents are the oldest? Where nearby can some of these rocks be found?
2. What age rocks is Dubuque built upon? What resources were found in these rocks?
3. Why are rocks of Mesozoic age largely missing from Iowa?
4. What is the history of glaciation in Iowa and Dubuque? What were several effects?
5. Explain the competition for resources in the boundary Waters area.
6. Why are there so many lakes in Minnesota?
7. Where do the oldest rocks in Iowa appear at the surface?
8. What are evaporites? Name two.
9. What is the Driftless Zone?
10. What are several of today's environmental challenges in Iowa?
11. Explain the impact of nutrients upon water quality.
12. What are major influences on Iowa's weather?
13. What is the difference between a fossil fuel and renewable energy?
14. Why do we think the Mediterranean Sea was once a desert?
15. What is the difference between absolute and relative age-dating?
16. What are some principles for relative dating?
17. What is an isotope? What is radioisotopic decay? What is it used for?
18. How can oxygen isotopes be used to estimate past water temperatures?
19. Give two reasons why Des Moines and Dubuque look so different.

20. What is the difference between a rock and a mineral?
21. What is the difference between felsic and mafic silicate minerals?
22. What are some common minerals that are not silicates?
23. how does the density and melting points of mafic and felsic minerals influence where they are found?
24. How are elements in a mineral bonded together?
25. What is a hydrogen bond? Why does it matter?
26. Be able to sketch the rock cycle.
27. Be able to identify the properties of quartz, mica, copper, galena, halite and diamond.
28. What is uniformitarianism?
29. Be able to determine the relative age of layers of rock, such as we did in lab.
30. Why do waterfalls occur?
31. Explain the phrase, "Resistant rocks stand high in relief."
32. How can you tell if a sediment has been transported by ice or water?
33. Review the history of Dubuque.
34. What evidence supports the hypothesis that the dinosaurs were destroyed by a meteorite impact in the Yucatan, Mexico.
35. How fast do tectonic plates move? What are some ways in which we determine their rate?
36. How does geologic history affect the making of underwear in North Carolina?