

ESC 115 Physical Geology

Spring (Winter?) 2009

Test 1

The first 10 questions refer to the slides we will view together in class. Please use the space provided to answer the questions.

1. **4 pts** How were the rocks shown likely transported? Why?
2. **5 pts** How does the figure shown represent? How is it related to the history of Dubuque?
3. **4 pts** The figure shown is a of the age of the rocks beneath Iowa. What are two ways this relates the Dubuque area?
4. **6 pts** What is the mineral shown in A? What is the type of bond shown in B? What is the process shown in C?
5. **6 pts** What is the mineral shown? Describe the bonds present. What are the four types of bonds found in minerals?

6. **5 pts** The figure shown is of Siccar Point, important in James Hutton's early understanding of uniformitarianism. What is uniformitarianism? How did the location shown help Hutton develop his theory?

7. **4 pts** What is an isotope? What is a radioactive isotope used for?

8. **6 pts** Water molecules are not symmetric. What are three effects?

9. **6 pts** How could you tell if the mineral shown is calcite, halite or quartz?

10. **5 pts** How can the presence of the fossils in a rock layer be used?

11. **4 pts** What are two reasons Minnesota has so many lakes?

12. **4 pts** Give two reasons why Des Moines and Dubuque look so different.

13. **6 pts** Sketch and label the rock cycle, including the processes for forming the rocks.

14. **4 pts** Explain the phrase, “Resistant rocks stand high in relief.” How does it relate to the making of underwear in North Carolina?

15. **4pts** Why is it important to take all your antibiotics when you are sick?

16. **4 pts** What are two environmental challenges in Iowa today?

17. **4 pts** How does gypsum relate to the evidence for the meteorite impact that caused the dinosaurs to become extinct?

18. **5 pts** What are three ways that rocks relate to my dad's heart attack (and mom's separation of the fat from the meat)? Construct a chart to show the differences. How do these differences influence where the rocks are found?

19. **4 pts** What was one review question not used on the test that you prepared for?