

ESC 115 Physical Geology

Fall, 2008

Test 1

The first 9 questions refer to the slides we will view together in class. Please use the space provided to answer the questions.

1. **4 pts)** Were the rocks shown transported by streams or glaciers? How can you tell?
2. **6 pts)** How could you test the mineral shown to determine if it is calcite, halite, or quartz?
3. **(4 pts)** What is the mineral shown in part A? How does it relate to the diagram in B?
4. **(9 pts)** What type of bonding is being shown? What are the three other types of bonds between elements of a mineral? Which is the strongest?
5. **(4 pts)** Examine the figure shown. Explain how it relates to two differences in Dubuque and Des Moines.

12. **(6 pts)** Iowa is strongly dependent on agriculture for its economy. How does that impact water quality? What are two impacts of current oil prices upon agriculture?
13. **(8 pts)** Construct a chart below showing three properties of silicate minerals and how they differ for felsic and mafic minerals.
14. **(4 pts)** How does a property of gypsum contribute to our evidence of the impact in the Yucatan that end the time of the dinosaurs, as described in the online essay on the death of the dinosaurs and discussed in class?
15. **(4 pts)** The weather in Dubuque this week has been clear and cool. Why? How does this relate to typical Iowa weather patterns?

16. **(9 pts)** Construct a diagram of the rock cycle, including the processes that form the rocks.

17. **(5 pts)** Think of one of the review questions that you prepared for this test. Answer it here.