ESC 115 Physical Geology

Fall, 2012

Test 1

The first 9 questions refer to the slides we will view together in class. The 10th slide is a reference to help you with the test. Please use the space provided to answer the questions.

fere	nce to help you with the test. Please use the space provided to answer the questions.
1.	4 pts Explain why Minnesota has so many lakes. (Don't give just a one-word answer. Explain the process of lake formation.)
2.	4 pts Explain the difference between uniformitarianism and catastrophism, using as an example explanations of earthquakes.
3.	4 pts How were the rocks shown likely transported? Why?
4.	4 pts What are two features in the slide shown that are examples of attempts to reduce soil loss?
5.	4 pts The white central area in the slide shown is where Dubuque is located. What does the white indicate? Explain.

6.	4 pts How could you tell if the mineral shown is calcite, quartz, gypsum, or halite? Explain. Be sure to give an explanation for how you would test each of the four minerals.
7.	6 pts What is an isotope? What are two geological uses for them?
8.	4 pts What is the process shown? What are three other characteristics of water that result from hydrogen bonds?
9.	8 pts What is the mineral shown? What type of mineral bond is it an example of? Name the three other types of mineral bonds and give example minerals for each. (Remember that hydrogen bonds are not examples of mineral bonds.)
10.	6 pts Mining has been important to Dubuque. Give three details of that history that relates to geology.
11.	6 pts What are three minerals that are not silicates? Why are they important?

12.	4 pts Give an example showing that you know the difference between relative and absolute age dating.
13.	6 pts If you were to climb in your car and drive from Dubuque northward, what would be three geologic features you could observe?
14.	 3 pts For each of the following, why is it not considered a mineral? cubic zirconium wood mercury
15.	6 pts What are three rock properties that differ greatly between mafic and felsic rock. Tell how they differ.
16.	4 pts How does geologic history affect the making of underwear in North Carolina? Why is that history less relevant today?
17.	4 pts Pick any two of the stories I've told in class and/or written up on the web site, and explain their main point and how they relate to geology.

18.	9 pts Sketch	and label the roc	k cycle, includiną	g the processes for	or forming the roc	ks.
19.	5 pts What a three things t	are two things tha	t contribute mos	t to you doing w e way of your su	ell in this course?	What are
20.	5 pts What v	was one review qu	estion not used o	on the test that y	ou prepared for?	Answer it.