

Geologic Time Prelab

Answer the following questions using Chapter 17: Interpreting Geologic History from your Marshak Lab Manual, pg 418-426

1. Explain in your own words the difference between relative age and numeric age.

2. What are the 4 principles of relative age dating discussed in this chapter?

- a. Principle of _____
- b. Principle of _____
- c. Principle of _____
- d. Principle of _____

3. Which principle would you use to figure out which is younger in a geologic sequence, the deposited sedimentary layers, or a fault running through them? _____

4. Looking at the above question, which IS younger – the fault or the layers? _____

5. Which principle would you use when dating a granite pebble within a larger piece of conglomerate? _____

6. Sedimentary layers are usually deposited in _____ beds.

7. Which principle of relative dating did Nicolaus Steno come up with 400 years ago?

8. In horizontal sedimentary rock layers, we can assume the _____ layer is on top, and the _____ layer is on the bottom.

9. In a graded bed, the _____ sediment on the bottom is coarse, and the _____ sediment on the top is fine.

10. Give a definition for **unconformity**, using your own words.

11. What are the 3 kind of unconformity?

- a. _____ ; involves the erosion of horizontal sedimentary rocks
- b. _____ ; involves the erosion of tilted sedimentary rocks
- c. _____ ; involves the erosion of igneous or metamorphic rocks