

Earth and Life History

Name:

Earth's Past Benchmark Review

Period:

Use your brain to answer the following questions, then check your work using Chapter 8.

1. In the sentence "Younger rocks lie above older rocks if the layers have not been disturbed," what does the word **layers** mean?

_____ 2. Paleontologists study

- a. craters on the moon and Earth.
- b. the history of life on Earth.
- c. the use of radioactivity for electric power.
- d. erosion and deposition.

_____ 3. To determine relative ages, geologists use

- a. the principle of superposition.
- b. radiometric dating.
- c. half-lives.
- d. catastrophism.

_____ 4. Rock layers that are cut by a fault formed

- a. after the fault.
- b. before the fault.
- c. at the same time as the fault.
- d. There is not enough information to determine the answer.

_____ 5. An unconformity is

- a. evidence of past life.
- b. a tilted rock layer.
- c. an isotope that has no half-life.
- d. a gap in a rock-layer sequence.

_____ 6. The rock cycle describes

- a. how round mineral crystals form.
- b. how to find the absolute age of a rock.
- c. how to find the relative age of a rock.
- d. how rock changes to form new rock.

_____ 7. Sedimentary rock

- a. forms from layers of sediment.
- b. forms when sediment is cemented.
- c. can be heated and squeezed to form metamorphic rock.
- d. All of the above

8. What is uniformitarianism in Earth science?

9. Describe the role of paleontology in the study of Earth's history.

10. How do geologists use the principle of superposition?

11. How has life on Earth has been affected by major catastrophic events?

12. How do geologists know that an intrusion is younger than the layers it cuts across?

13. How old is Earth? _____ What evidence do we have that supports this?

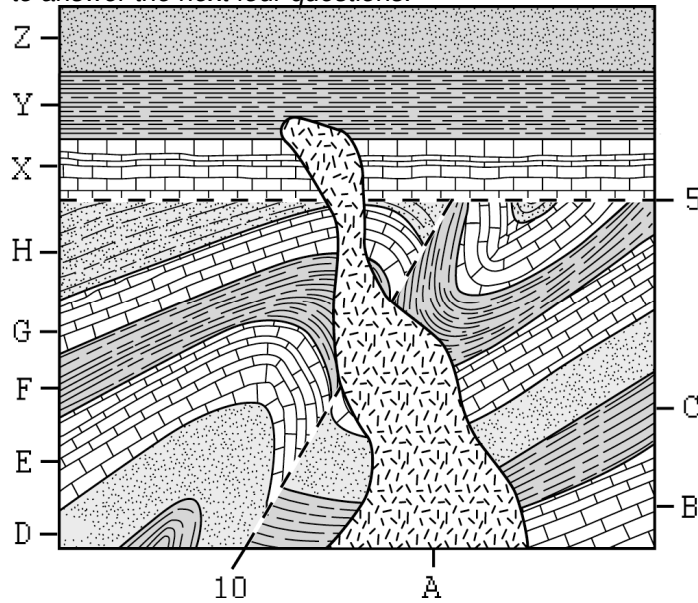
Earth and Life History
Earth's Past Benchmark Review

Name:
Period:

14. What are the source materials for sedimentary rocks?

15. Why are sedimentary rocks often found in layers? Why are the oldest layers generally on the bottom?

Use the diagram below to answer the next four questions.



16. Is intrusion A younger or older than layer X? Explain your answer.

17. What is feature 5? _____

18. Is intrusion A younger or older than feature 10? Explain your answer.

19. Other than the intrusion and faulting, what event happened in layers B, C, D, E, F, G, and H? Number this event, the intrusion, and the fault in the order that they happened.