

Part 1.

1. _____ time compares the age of one thing with another.
2. _____ time gives a specific date or age for something.

Part 2.

3. In your own words, describe the law of superposition.

4. In your own words, describe the law of cross-cutting relationships.

5. In your own words, describe the law of included fragments.

6. A break in the rock record is called an _____.

Part 3.

7. The basis for relative time is the _____ record.
8. A _____ is any evidence of earlier life preserved in rock.
9. When the hard parts of an organism are replaced by minerals it is called _____.
10. If the original material is dissolved out of the rock it leaves a _____.

Part 4.

11. Fossils typical of a particular time in Earth's history are called _____ or _____.
12. Describe the three characteristics of the fossils in question 11.

13. What is a key bed?

Part 5.

14. Describe how tree rings can be used for determining age.

Part 6.

15. What is a varve?

16. How can varves be used to establish dates?

Part 7.

17. Radiocarbon dating was developed in _____ by _____.
18. The useful range of this dating method is up to _____ years ago.

Part 8.

19. Does radioactive dating of rocks give an absolute or relative age?
20. A radioactive dating method useful to geologists is the _____ method.
21. Why is the method in #20 not always useful to geologists?

22. What are the other two common radioactive clocks used?

Timeline Procedure

23. Ask your teacher for a strip of paper about 5 m long. About 1 cm from one end draw a sharp pencil line across the strip. Label this line *NOW*.
24. Measuring from the *NOW* line, mark dotted lines at 1 m, 2 m, 3 m, 4 m, & 4.5 m. Label the first *ONE BILLION YEARS AGO*, the second *TWO BILLION YEARS AGO*, etc. At the 4.5 mark also include the title *EARTH'S BEGINNING?* Be sure to include the question mark. Why is the question mark important?
25. If each metre represents one billion years, how much time does each of the following represent?
 - a. 100 cm _____
 - b. 1 cm _____
 - c. 1 mm _____
26. Using the table on p. 600-601 as a guide, accurately measure and label each of the Eras, Periods, and Epochs. Use a different colour for each Era. Be sure to include at least one characteristic life form for each Epoch.
27. Once you get close to *NOW* it will be difficult to find room for all the events that happen. How are you going to accommodate this problem?
28. When you are happy with your timeline, hand it in for marking. Remember, it counts as your Unit 6 mark, so do a good job.