Handout 1 (pink) Geologic History Name_____ Period_____
Standard 2.5

Chapter 8: Section 1: Directed Reading Pages 185-190

RELATIVE AGE (page 186)

1. What type of rock is commonly used by scientists to determine the relative age of rocks?

2. When do sedimentary rocks form?

3. What does the law of superposition helps scientists determine?

UNCONFORMITIES (page 189)

4. According to the law of superposition, what is the age relationship of rocks on either side of an unconformity?

5. How does a nonconformity form?

6. What law do scientists apply to determine relative ages of rock when they find faults or intrusions?

7. What is the relative age of a fault or igneous intrusion that cuts through an unconformity?

Chapter 8: Section 3: Directed Reading Pages 197-200

INDEX FOSSILS (page 200)

8. Fossils that are found only in the rock layers of a particular geologic period are called _____.

9. What is most important about the features of an index fossil?

____ **10.** The organisms that form index fossils lived

a. during a short span of geologic time. **b.** during a long span of geologic time.
c. for about 2 million years **d.** over any span of geologic time, long or short.

11. How commonly distributed must the fossil of an organism be in order to be considered an index fossil?

____ **12.** Rock layers in which index fossils have been found can be dated accurately because the organisms that formed the index fossils lived

a. for a long span of geologic time. **b.** for a short span of geologic time.
c. all over Earth. **d.** in a small part of Earth.

13. How can scientists use index fossils to determine the absolute age of rock layers in different parts of the world?

Chapter 9: Section 1: Directed Reading Pages 211-213

GEOLOGIC TIME (page 211)

14. Where can we find evidence of changes in conditions on Earth's surface?

15. What is the purpose of the geologic time scale?

THE GEOLOGIC COLUMN (page 211)

16. The ordered arrangement of rock layers is called a(n) _____.

17. In a geologic column, the oldest rocks are located at the _____ of the column.

18. How do the fossils in the upper layers of a geologic column differ from those in the lower, older layers?

19. What method has enabled scientists to determine the ages of rock layers more accurately?

DIVISIONS OF GEOLOGIC TIME (page 212)

20. What three indicators do geologists use to divide the geologic time scale into smaller units?

21. How are rocks grouped within each unit of geologic time similar?

22. Identify the era, period, and epoch we are in today.

Chapter 9: Section 2: Directed Reading Page 215

23. Where is the geologic history of Earth recorded?

24. What kind of information can scientists get from the types of rock and the fossils in a rock layer?

EVOLUTION (page 215)

25. The gradual development of new organisms from other organisms since the beginning of life is called _____.

26. Climatic and geologic changes could affect an organism's ability to _____.

27. What do scientists study to learn why some organisms survived over long periods and others became extinct?