

## Earth Science Test: Geologic Time

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Section: \_\_\_\_\_

\_\_\_\_\_ 1. What is the correct order of categories for the Geologic Time Scale, from shortest to longest?

- a. Eon, era, period, epoch
- b. Era, eon, period, epoch
- c. Era, epoch, eon, period
- d. Epoch, period, era, eon

\_\_\_\_\_ 2. The Geologic Time scale:

- a. Is divided into time periods, such as eras, periods, etc.
- b. Gives information about the appearance and disappearance of organisms
- c. Shows major tectonic events, such as the formation of the Rocky Mountains
- d. All of the above

\_\_\_\_\_ 3. Which era are we currently living in?

- a. Paleozoic
- b. Cenozoic
- c. Mesozoic
- d. Phanerozoic

\_\_\_\_\_ 4. Which of these eras is referred to as "The Age of Dinosaurs"?

- a. Cenozoic
- b. Mesozoic
- c. Proterozoic
- d. Paleozoic

\_\_\_\_\_ 5. How many periods are there so far in the Cenozoic era?

- a. 1
- b. 2
- c. 3
- d. 4

\_\_\_\_\_ 6. The geologic column is the ordered arrangement of the layers of rock making up Earth's crust, from oldest to youngest. Scientists have been able to determine the absolute ages of most rock layers in the geologic column using

- a. the law of superposition
- b. radioactive dating
- c. rates of deposition
- d. rates of erosion

\_\_\_\_\_ 7. To determine the age of a specific rock, scientists might correlate it with a layer in the geologic column that has the same relative position, physical characteristics, and

- a. fossil content.
- b. weight
- c. temperature
- d. density

\_\_\_\_\_ 8. An event that geologists would use in dividing the geologic time scale into smaller units is

- a. the eruption of a volcano
- b. a change in rock color
- c. A change in sediment type
- d. the arrival of an ice age

\_\_\_\_\_ 9. *Paleozoic* means

- a. ancient life
- b. middle life
- c. recent life
- d. primitive life

\_\_\_\_\_ 10. Precambrian time ended about

- a. 4.6 billion years ago
- b. 540 million years ago
- c. 64 million years ago
- d. 11,700 years ago

\_\_\_\_\_ 11. The first vertebrates appeared during the

- a. Precambrian
- b. Paleozoic Era
- c. Mesozoic Era
- d. Cenozoic Era

\_\_\_\_\_ 12. Which type of vertebrate was most common during the middle part of the era from the question above?

- a. amphibians
- b. fish
- c. sponges
- d. mammals

\_\_\_\_\_ 13. Dinosaurs became the dominant life form during the

- a. Permian Period
- b. Jurassic Period
- c. Silurian Period
- d. Quaternary Period

\_\_\_\_\_ 14. The *Age of Mammals* is the name commonly given to the

- a. Precambrian time
- b. Paleozoic Era
- c. Mesozoic Era
- d. Cenozoic Era

\_\_\_\_\_ 15. Which of the following is true?

- a. The Jurassic period was part of the Cenozoic era.
- b. The Ordovician period came before the Cambrian period
- c. The Paleozoic era lasted for about 290 million years.
- d. The Permian was the longest period of the Paleozoic era.

\_\_\_\_\_ 16. Which organisms were NOT alive during the time when the earliest fishes evolve?

- a. amphibians
- b. trilobites
- c. bacteria
- d. Invertebrates

\_\_\_\_\_ 17. Which was true of North America during the Early Paleozoic?

- a. It had many glaciers.
- b. It was at the North Pole.
- c. It was populated by reptiles.
- d. It was at the equator.

\_\_\_\_\_ 18. Which major event happened during the Mesozoic era?

- a. Humans evolved.
- b. Life moved onto land.
- c. The Appalachian Mountains formed.
- d. The Atlantic Ocean formed.

\_\_\_\_\_ 19. During which epoch of the Cenozoic era was North America mostly covered by glaciers and populated by mega-mammals, such as saber-tooth tigers, woolly mammoths, and giant ground sloths?

- a. Holocene
- b. Pleistocene
- c. Pliocene
- d. Oligocene

\_\_\_\_\_ 20. During which period did modern humans evolved?

- a. Cretaceous
- b. Paleogene
- c. Neogene
- d. Quaternary

\_\_\_\_\_ 21. Which is true for the beginning of the Cenozoic era?

- a. Mammals and dinosaurs lived together.
- b. Mammals first appeared.
- c. Dinosaurs had killed most mammals.
- d. Dinosaurs were extinct.

\_\_\_\_\_ 22. Which mountain range formed during the Cenozoic Era?

- a. Appalachian
- b. Himalayas
- c. Andes
- d. Rocky

\_\_\_\_\_ 23. Many marine fossil and salt beds formed during the Mesozoic Era. Scientists have concluded that this is the result of more shallow seas during that era. What can scientists determine from the existence of these seas?

- a. More water was locked up as ice in ice caps and glaciers.
- b. There were many more mountain ranges to surround shallow seas.
- c. The continents were all located together in Pangaea.
- d. Water levels on the continents were higher because the climate was warmer.

\_\_\_\_\_ 24. The fossil record supports the concept that

- a. extinction of species is rare.
- b. many species that once lived are now extinct.
- c. plants and animals do not change over time.
- d. Earth's atmosphere has not changed over time.

\_\_\_\_\_ 25. Archaeological evidence indicates that humans migrated from Asia to North America during the Pleistocene epoch. These two continents are currently separated by an ocean. Which theory describes how humans **most likely** moved between the continents.

- a. Both continents were part of Pangaea, so they were connected.
- b. During the Ice Age, sea levels were lower, and a land bridge was exposed between the continents.
- c. Higher sea levels during the Ice Age allowed humans to pass between continents on boats.
- d. Humans traveled through shallow water by riding on large, domesticated animals that could wade through the water.