

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. Which era are we currently living in?

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

_____ 3. Which of these eras is referred to as "The Age of Dinosaurs"?

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

_____ 4. 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

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

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

_____ 6. *Paleozoic* means

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

_____ 7. 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

_____ 8. 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

_____ 9. Precambrian time ended about

- a. 4.6 billion years ago
- b. 570 million years ago
- c. 64 million years ago
- d. 11,700 years ago

_____ 10. 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

_____ 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. Which organisms were NOT alive during the time when the earliest fishes evolved?

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

_____ 15. The *Age of Mammals* is the name commonly given to the

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

_____ 16. 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.

_____ 17. 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.

_____ 18. 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.

_____ 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. The largest mass extinction event, with over 1,000 genera lost, occurred at the end of which period?

- a. Devonian
- b. Permian
- c. Cretaceous
- d. Triassic

_____ 22. 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.

_____ 23. 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.

_____ 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. 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.