The Lincoln Memorial was built out of Indiana limestone. This means that during the period when this limestone was formed, Indiana was

- a. a desert
- b. under water
- c. covered with ice

answer: b

What types of fossils would you expect to find in this Indiana limestone?

- a. crinoids
- b. ferns
- c. insects
- d. none of the above
- e. all of the above

answer: a

The "Cambrian Explosion" refers to

- a. The apparently sudden evolution of many early life forms
- b. A devastating explosive volcanic eruption during the Cambrian
- c. The event that killed the dinosaurs

answer: a

What is the age of the earliest evidence of life on Earth? _____ answer: Neoproterozoic or Proterozoic or Precambrian or Ediacaran

Dinosaur X lived in swamps. How do paleontologists know this?

- a. Because fossils of Dinosaur X were discovered near a swamp
- b. Because of the type of rock Dinosaur X fossils were found in
- c. Because of the density of Dinosaur X's bones
- d. Because of the shape of Dinosaur X's bones

answer: b

At the end of which geologic period did approximately 50% of the world's taxonomic families go extinct, the largest extinction in Earth's history?

- a. Cretaceous
- b. Permian
- c. Tertiary
- d. Jurassic

answer: b

Match the common name with the scientific name:

answer:

Angiospermae flowering plants

Annelida worms

Aves birds

Bivalvia clams

Equus horses Ostrea oysters Pisces fish

Porifera sponges

Ursus bears

Name the 3 main taxonomic orders of corals:

answer: Rugosa, Tabulata, Scleractinia

For each of the following fossils, identify the GENUS of the fossil and the environment in which it lived: marine, freshwater, or terrestrial:



answer: Belemnitella, marine



answer: Deltoblastus, marine



answer: Fenestella, marine



answer: Acidaspis, marine



answer: Septastraea, marine



answer: Dimerocrinites, marine



answer: Platystrophia, marine



answer: Lepidodendron, terrestrial



What is the most likely cause of the hole in this shell?

- a. erosion
- b. it's the way this shell naturally grew c. predation

answer: c

Identify these teeth as those of an herbivore or a carnivore:



answer: carnivore



answer: herbivore



answer: herbivore

Identify each of the following as either a brachiopod or a bivalve:



answer: brachiopod



answer: brachiopod



answer: bivalve



answer: bivalve



answer: brachiopod



answer: bivalve



answer: bivalve

Which end of this stratigraphic section was originally on the top?







answer: rightmost

Assuming these strata have not been disturbed by tectonic movement, and assuming trilobites were found in the top stratum, label the strata using the ages found in this list:

(4 layers)

choices:

Cambrian

Cretaceous

Devonian

Jurassic

Permian

Precambrian

Quaternary

Triassic

answer: from bottom to top, Precambrian, Cambrian, Devonian, Permian

Place the following fossils in chronological order, from oldest to youngest:









d.

answer: b (Paradoxides, Cambrian), a (Mucrospiriferida, Devonian), d (Pavlovia, Jurassic), c (Mammuthus, Mio-Pleistocene)

Place the following fossils in chronological order, from oldest to youngest:







answer: b (Cystiphyllum, Silurian), c (Scaphites, Cretaceous), a (Chesapecten, Miocene)

Place the following in the order of their FIRST occurrence:

- a. ferns
- b. ginkgo
- c. angiosperms
- d. algae
- e. mammals
- f. amphibians

answer: d, a, f, b, e, c

Label the thorax, cephalon, and pygidium on this trilobite:



answer: thorax is the middle body, cephalon is the head shield, pygidium is the tail shield

Is this a plant or an animal?



answer: animal (Crinoidea)

Which of the following photos depicts the environment in which the Ediacaran fauna lived?







answer: c