

GLOSSARY

BRACHIOPODS = Marine animals with 2 shells. At one time they were the most abundant shellfish in the sea.

TRILOBITE = A general name for an important group of extinct marine animals (phylum Arthropoda, class Crustacea) whose remains are found in rocks of Paleozoic age. They have a compressed trilobate body with numerous segments in the thoracic region. Some forms are especially valuable as guides to the fossils for the Cambrian Period.

CONTINENTAL DRIFT= A concept that continental masses, composed largely of sialic rock, have moved widely and differentially over and through the denser mafic rock that underlies continental blocks and ocean floors.

PLATE TECTONICS = The concept that the crust and outer mantle of the earth are divided into large plates or tabular blocks that are capable of mutual reactions that produce earthquake belts, mountain ranges, and other major features.

CORALS = A general name for any of a large group of marine invertebrate organisms that belong to the phylum Coelenterata, which are common in modern seas and have left an abundant fossil record in all periods later than the Cambrian. The term coral is commonly applied to the calcareous skeletal remains. As found in the fossil state, coral consists almost exclusively of calcium carbonate.

CEPHALOPOD = Any member of a large class of mollusks whose head and mouth are circled with muscular tentacles. Water is drawn in and expelled through a siphon. The eyes are well developed and the whole animal is highly organized for rapid intelligent action. Many fossil remains have been discovered in rocks of Cambrian age and younger. Modern representatives include the squid, octopus, and pearly nautilus.

QUIZ

1. Scientists believe that the first life on Earth began about:

- A) 1,000,000 Years ago.
- B) One billion years ago.
- C) 3.5 billion years ago.
- D) No way of telling.

2) The earliest fossils known to exist are:

- A) Stomatolites
- B) Crinoids
- C) Trilobites
- D) Stegasaurus

3) The primitive Earth did not have:

- A) Sunlight
- B) Volcanoes
- C) An atmosphere
- D) Seas

4) The first life forms probably did not use

- A) Oxygen
- B) Carbon dioxide
- C) Water
- D) Silicon

5) A simple, two shelled animal which was the most abundant shellfish in the Oceans was the:

- A) Trilobite
- B) Crinoid
- C) Brachiopod
- D) Graptolite

6) A cousin to the crab and lobster, these Ancient animals, now extinct, had a head with eyes and mouth, a jointed body and tail.

- A) Brachiopods
- B) Mollusks
- C) Trilobites
- D) Gastropods

7) A large Continent which was made up of So. America, Antarctica and Australia during the Ordovician was known as:

- A) Pangaea
- B) Gordwanaland
- C) Surseys
- D) Trilobiteland

8) At the end of Cambrian time most plants and animals suddenly died out. This was probably caused by:

- A) Change of climate
- B) A world wide viral epidemic
- C) A large flood which covered the earth
- D) Meteoritic or comet impact

9) This period saw the development of the vertebrates, animals with backbones such as sharks and boney fishes.

- A) Ordovician
- B) Silurian
- C) Devonian
- D) Carboniferous

10) During this period, insects began to flourish on land and there was a rise of the first amphibians:

- A) Ordovician
- B) Silurian
- C) Devonian
- D) Pleistoceie

11) During this period the climate was tropical. There were thick forests and many swamps where ferns grew to 150' tall:

- A) Carboniferous
- B) Silurian
- C) Devonian
- D) Triassic

12) This period ushered in the mammal-like reptiles which dominated the earth and saw the development of the first cycads, ginkos and beetles:

- A) Ordovician
- B) Silurian
- C) Permian
- D) Miocene

TEACHER'S ACTIVITIES:

CONCEPT/OBJECTIVES: This program is an overview of life forms and how they have been preserved in nature. It looks at common fossils found in the United States and investigates the origin of these animals and how Paleontologists have classified them according to their various characteristics.

PROGRAM CONTENT: The program shows how geologists have devised the geologic time chart, a division of all life on this planet. Among those highlighted are corals, bryozoans, brachiopods, mollusks, pelecypods, gas-tropods, arthropods, trilobites and crinoids. The program shows the basic characteristics of each of these life forms and how they were fossilized.

PRE-VIEWING ACTIVITIES:

1. Discuss what "old" means.
2. Explain how fossils are only found in sedimentary rocks.

POST-VIEWING ACTIVITIES:

1. Bring in a small collection of fossils.
2. Using cement and shells, demonstrate how fossils are formed.

HOME ACTIVITIES:

1. Make a list of common fossils you might expect to find in your area.
2. Find out where fossil collections could be found in your area.
3. Put together a collection of local fossils.

QUIZ ANSWERS

- 1) C
- 2) A
- 3) C
- 4) A
- 5) C
- 6) C
- 7) A
- 8) D
- 9) C
- 10) C
- 11) A
- 12) C

Physical Geography II Series

LIFE DURING THE PALEOZOIC ERA

KG1168DVD

PROGRAM DESCRIPTION

This program explores that very long period of time from the Cambrian (over 600 million years ago). You will see the fossil record and artists drawings and dioramas of life in the Cambrian, Ordovician, Silurian, Devonian, Mississippian, Pennsylvanian and Permian Periods. You will see plant life, marine life and land life including diatoms, algae, mosses, ferns, cycads, brachiopods, trilobites, crinoids, insects, reptiles, ammonites, sharks, and fish. The program also discusses mass extinction theories and shows how the continents have moved.



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