

The geologic timescale is marked by significant geologic and biological events, including

question 1

The word "significant" in the passage is closest in meaning to

A numerous

B important

C unexplained

D sudden

question 2

The period discussed in the passage is referred to as an "explosion" because it

A occurred 0.6 billion years ago, late in Earth's history

B was characterized by the unusually fast evolution of many new life-forms

C was characterized by widespread animal extinction

D was characterized by violent volcanic eruptions

question 3

According to Paragraph 2, which of the following is NOT a question that paleontologists ask?

A Why was the origin of life a simple step in Earth's history?

B Why did it take so long for multicellular organisms to develop?

C Why did animal life evolve so rapidly?

D Why does the fossil record lack evidence of animal evolution during that time?

question 4

Which of the following best describes the relationship between paragraph 2 and paragraph 3?

- A Paragraph 2 puts forward several scientific claims, one of which is rejected in paragraph 3.
- B Paragraph 2 poses several questions, and paragraph 3 offers a possible answer to one of them.
- C Paragraph 2 presents outdated traditional views, while paragraph 3 presents the current scientific consensus.
- D Paragraph 2 introduces a generalization that is illustrated by specific examples in paragraph 3.

question 5

Which of the following is NOT mentioned in paragraph 4 as being true of the Ediacara fossil bed?

- A It contains fossils that date back to the Precambrian period.
- B It contains only soft-bodied animal fossils.
- C It is located on a single site in Australia.
- D It does not contain any fossils of the ancestors of modern animals.

question 6

Which of the sentences below best expresses the essential information in the highlighted text?

- A The animals found in the Tommotian fossil bed were once thought to belong to a variety of modern animal groups.
- B Animals in the Tommotian fossil beds were initially assigned to modern animal groups, but later found to be different.
- C Though at first they thought otherwise, paleontologists now agree that the animals in the Tommotian fossil beds were once thought to belong to a variety of modern animal groups.
- D It is unclear whether the Tommotian fossils from the early Cambrian period represent a variety of modern animal groups.

question 7

Why does the author mention "Anomalocaris" and "Wiwaxia" ?

- A To contrast predators with animals that eat plants such as algae

- B To question the effects of rapid mud slides on fossilization
- C To suggest that much is still unknown about animals found in the Burgess Shale
- D To provide examples of fossils that cannot be assigned to a modern animal group

question 8

What can be inferred from paragraph 7 about why the Cambrian explosion is so unusual?

- A It generated new ecological niches through the extinction of many unique animals.
- B It was a period of rapid evolution, and evolution is often thought of as a slow process.
- C It is a period whose evolutionary sequences are clearly marked.
- D It generated a very large number of ancient fossil beds containing soft-bodied animals.

question 9

Look at the four squares [] that indicate where the following sentence could be added.

The geologic timescale is marked by significant geologic and biological events, including the Cambrian explosion.

question 10

Directions: An introductory sentence for a brief summary of the passage is provided below. Select the 3 answer choices that, taken together, best summarize the passage. Write the letters of your answer choices in the spaces provided.

- A. Little is known about the stages of evolution during the Cambrian period, in part because of the rapid pace of change.
- B. While animal fossils from before the Cambrian explosion have no modern descendants, those from the Cambrian period do.
- C. The Cambrian period is significant because it marks the emergence of eukaryotic life forms.
- D. The Ediacara fossil formation provides the most information about the Cambrian explosion.
- E. Zoologists are awaiting the discovery of a 600-million-year-old fossil formation in order to learn more about the Cambrian explosion.
- F. Although the reasons for the rapid evolution of animals during the Cambrian period are not clear, the period is significant because it marks the emergence of eukaryotic life forms.

