

A bone bed is an underground area where many fossils have formed. Find out about a bone bed in Africa where the discoveries have raised as many questions as they have answered. Read the selection below. Then read each question and choose the best answer. Use the provided answer sheet at the end of the workbook to record your answers.

## The Mysterious Bone Bed

Work in eastern Africa has revealed one of the most amazing fossil sites in the world. It contains a rich variety of animals, and the fossils are perfectly preserved. An international team of scientists has been studying the site for over 10 years, but one of the deepest mysteries about the site remains to be solved.

More than 20 years ago, a geological survey team was working in Kipsaramon, a very remote area of western Kenya. They found some fossils on a hillside that looked promising for a paleontological<sup>1</sup> study. They noted that the site deserved further research, but the area was largely untouched for many years. Researchers eventually returned to the site, and their work has revealed a bed of fossils that covers at least 2,000 meters. The site is more densely packed with fossils than any other site in Kenya, and it is probably one of the most concentrated deposits of fossils in the world.

When an underground layer of sediment has a large number of fossil bones in it, scientists may refer to it as a *bone bed*. Bone beds are very exciting because a lot of data may be retrieved from just one site. In some cases, entire populations may be preserved there. This allows scientists to

study the range of variation within a single species, and it may give information on how members of the species grew and interacted. In other cases, several different species may be present.

The Kipsaramon bone bed, which has been dated to about 15.5 million years, contains thousands of individual organisms. Dozens of different extinct species are present. These include rhinos, turtles, and apes, as well as crocodiles, antelopes, and squirrels. There are even some specimens of fossilized wood. By putting together all of the information from the site, scientists have been able to get a picture of an entire prehistoric ecosystem.

How did the Kipsaramon bone bed form? Even though scientists have developed several ideas about this question and tested them against the fossil evidence, they have not turned up an answer yet. A large number of animals may have died at once, such as in a flood. The bone bed may mark the location of a predator's favorite dining spot. For the time being, scientists are still seeking answers to this question and other questions as they investigate the incredible Kipsaramon bone bed.

1. **paleontological**: related to the study of fossils

## The Mysterious Bone Bed

---

1. What is the *main* purpose of this selection?
  - A to persuade readers to study about fossils and bones
  - B to teach readers how to remove bones from a bone bed
  - C to inform readers about an important bone bed
  - D to entertain readers with an adventure story set in Africa
  
2. The selection says that, "Bone beds are very exciting." Which of these statements is a supporting detail of this statement?
  - A Bone beds contain a lot of data.
  - B Scientists have many questions about how bone beds developed.
  - C The Kipsaramon bone bed is about 15.5 million years old.
  - D Scientists have tested theories about bone beds against fossil evidence.
  
3. Why do some scientists think that the Kipsaramon bone bed may mark a predator's favorite dining spot?
  - A Many animal fossils were found in this spot.
  - B It is in western Kenya.
  - C It covers at least 2,000 meters.
  - D The fossils are perfectly preserved.
  
4. Which statement about the Kipsaramon bone bed is a fact?
  - A The Kipsaramon bone bed is an amazing fossil site.
  - B The Kipsaramon bone bed is more densely packed with fossils than any other site in Kenya.
  - C The Kipsaramon bone bed is very exciting.
  - D The Kipsaramon bone bed was a favorite dining spot of predators.

## The Mysterious Bone Bed

---

5. Which statement about the Kipsaramon bone bed is an opinion?
- A The Kipsaramon bone bed is in western Kenya.
  - B The Kipsaramon bone bed covers at least 2,000 meters.
  - C The Kipsaramon bone bed is about 15.5 million years old.
  - D Animals in the Kipsaramon bone bed were wiped out in a flood.
6. Which website would be *most likely* to help you learn more about Kenya?
- A a site about the history of Kenya
  - B a scientific journal's website
  - C a paleontology website
  - D a site about the Kipsaramon bone bed
7. According to the selection, which statement about the Kipsaramon bone bed is *most likely* true?
- A It is the only important bone bed in the world.
  - B It may give scientists clues about the history of humans.
  - C It will provide scientists with much useful information.
  - D It will keep researchers busy for the next twenty years.
8. The author says, "A large number of animals may have died at once, such as in a flood." Why does the author use the word *may*?
- A to suggest that scientists are certain about how the animals died
  - B because a poor source of information was used for this article
  - C to suggest that the animals definitely all died at once
  - D because no one knows for sure how the bone bed formed



## The Mysterious Bone Bed

---

9. About how many years after the discovery of the Kipsaramon bone bed did scientists begin to really study the site?
- A 5 years
  - B 10 years
  - C 20 years
  - D 30 years
10. What is the *most likely* reason that paleontologists did not begin studying the Kipsaramon bone bed immediately after they found it?
- A No one thought it was worth the time.
  - B The Kenyan government does not allow such studies.
  - C They forgot about it.
  - D They needed to gather a team and raise funds.
11. According to the selection, which of these events happened after the discovery of the Kipsaramon bone bed?
- A Researchers worked at the site and learned a great deal.
  - B Thousands of organisms died there.
  - C The first geology team traveled to Kenya.
  - D A larger bone bed was found in Nepal.