

Name: _____

Fossils: Clues to the Past

By *Cindy Sherwood*

Everybody knows that dinosaurs once roamed the earth. But how do we know that fact? Dinosaurs lived many millions of years ago and there were no photos taken of them (or any people around to take those photos!). Yet scientists do have proof of dinosaurs, thanks to fossils.



Preview

Please log in to download the printable version of this worksheet.

skeleton gets crushed by more layers of sediment. Eventually, the sediment hardens into rock over the bones, which decay. When that happens, minerals slowly replace the bones and make a cast of the skeleton in the same shape as the original. Millions of years later, the rock surrounding the skeleton surfaces after an earthquake or after erosion from wind and rain. The fossil is then just waiting to be found, perhaps by someone like you digging it up from the ground!



There are some other, more unusual ways for fossils to form. Scientists have discovered skeletons of animals that died instantly when a volcano erupted, their bones preserved in the ash. Small bugs or insects caught in tree sap can become fossils when the sap hardens into a golden material called amber. And animals trapped

in sticky natural asphalt or tar can turn into fossils. The most famous example of these fossils can be found right in the middle of California's biggest city, Los Angeles. Scientists have uncovered more than three million fossils from the Ice Age at the *La Brea Tar Pits*, including saber-toothed cats and mammoths. And scientists there continue to dig up more fossils all the time!



Huge dinosaur skeletons are probably the most famous kinds of fossils. The largest ever found is a dinosaur called *sauroposeidon* (sore'-oh-puh-sie'-dun). Scientists think this type of dinosaur was 60 feet long and weighed 60 tons—that equals 120,000 pounds! But fossils are not always



Preview

Please log in to download the printable version of this worksheet.

studying fossils is alive and well. *Paleontology* (pay-lee-un-fall'-uh-gee) is the study of the history of life on earth, using fossils as the evidence. So if you love dinosaurs and you want to know more about what happened on Earth thousands or millions of years ago, maybe someday you can make your living by digging up fossils!

Name: _____

Fossils: Clues to the Past

By *Cindy Sherwood*



1. Which of the following statements is true about fossils?

- a. The oldest fossils on record date back to the time of the first humans living in North America.
- b. Only large animals, like dinosaurs, mammoths, and saber-toothed cats, are capable of becoming fossilized.



Preview
Please log in to download the printable version of this worksheet.

3. Where are you most likely to discover a fossil?

- a. in North America, only
- b. in Asia, only
- c. all continents except Africa
- d. anywhere on Earth

4. Using the information in the article, describe one way a fossil can form.

5. In your own words, describe what the *La Brea Tar Pits* are.

Name: _____

Fossils: Clues to the Past

By Cindy Sherwood

The following terms are vocabulary words from the article. Match the vocabulary word with its correct definition by writing the corresponding letter on the line.



1. _____ mammoths

a. small, non-flowering plants that include seaweed and single-celled organisms



Preview

Please log in to download the printable version of this worksheet.

5. _____ asphalt

was produced by now-extinct trees in prehistoric times

6. _____ algae

f. a framework of bones and cartilage supporting an animal's body

7. _____ erosion

g. ancient, extinct elephants from the time of the Ice Age

8. _____ evidence

h. a process in which rock or other material that has been broken down by wind, rain, or water is carried away

9. _____ skeleton

i. material that settles at the bottom of a body of water

10. _____ preserved

j. a dark, sticky mixture; natural tar or pitch

Name: _____

Fossils: Clues to the Past

By *Cindy Sherwood*

In the article, "Fossils: Clues to the Past," you learned that fossils help scientists learn about prehistoric animals, including dinosaurs and other extinct creatures, like mammoths and saber-toothed cats.

On the lines below, describe what kind of information scientists can learn about a prehistoric animal from studying its fossil. Base your answer on the information from the



Preview

Please log in to download the printable version of this worksheet.

ANSWER KEY

Fossils: Clues to the Past



Preview

Please log in to download the printable version of this worksheet.



when animal bones are preserved in ash, asphalt, or amber.

(Answers may vary.)

5. In your own words, describe what the *La Brea Tar Pits* are.

***La Brea Tar Pits* is an area in central L.A. where scientists have found millions of fossils.**

ANSWER KEY

Fossils: Clues to the Past



Preview

Please log in to download the printable version of this worksheet.



9. f. skeleton

10. c. preserved

or water is carried away

i. material that settles at the bottom of a body of water

j. a dark, sticky mixture; natural tar or pitch