

Section 4 – The fossil record provides evidence of Earth’s changes over time**4.1 Tracing Evidence of Geologic Change Using Fossils**

1. The preserved remains (even the soft parts) of a plant or animal can likely be found in ...
 - A. **amber**
 - B. **sediment**
 - C. **gemstones**
 - D. **Burgess Shale**

2. Trilobites are one of the most famous groups of fossils. They are now extinct. They lived in ...
 - A. **Gobi Desert**
 - B. **Antarctic Tundra**
 - C. **Fresh water lakes**
 - D. **Warm ocean water**

3. Scientists who study early life forms by interpreting animal and plant fossils are called ...
 - A. **geologists**
 - B. **geophysicists**
 - C. **paleontologists**
 - D. **archaeologists**

4. When an organism is buried under many layers of sediment, pressure and heat build up, leaving a thin film of carbon residue on the rock surfaces. This residue forms the outline of the organism and is called ...
 - A. **petrified residue**
 - B. **carbonaceous film**
 - C. **carbon-dated remains**
 - D. **trace fossil residue**

5. When an organism falls into soft sediment, like mud, its hard parts dissolve leaving a cavity called a ...
 - A. **trace layer**
 - B. **cast**
 - C. **mould**
 - D. **chamber**

6. There is more than one way for living organisms to become fossilized. A cavity or track that was left behind by a living organism – providing evidence that it existed, is a type of fossil called a ...
 - A. **cavity fossil**
 - B. **evidence fossil**
 - C. **trace fossil**
 - D. **track fossil**

7. The process that takes thousands of years and can only happen under certain conditions is called fossilization. The most common fossils found are ...
 - A. **plants**
 - B. **worms**
 - C. **jellyfish**
 - D. **vertebrates**

8. Over time layers upon layers of sediment build up , providing important information about the past. These layers called strata reveal certain fossils that lived in certain time periods. These fossils are known as ...
 - A. **trace fossils**
 - B. **index fossils**
 - C. **amber fossils**
 - D. **cast fossils**

4.2 Methods Used to Interpret Fossils

- Geological columns are formations in sedimentary rock that help scientists to determine the age of the fossils they find. Fossils found in column 7 will be ...
 - older than those found in 2 and 8
 - younger than those found in 10 and 6
 - older than those found in 4 and 3
 - younger than those found in 2 and 9
- Scientists have found organisms intact in this type of fossil and have even been able to extract DNA from the organism, with limited success ...
 - shale
 - amber
 - trilobite
 - albertosaurus
- Layers of sedimentary rock stay in their original position, with the newest layers on the top and the older layers on the bottom. These layers of rock are called ...
 - indexing
 - parent rock
 - rock strata
 - superimposed
- The preserved remains of many soft tissue species have been located in the Burgess Shale Fossil Beds, located in Yoho National Park, British Columbia. These fossils are usually the remains of ...
 - producers and herbivores
 - herbivores and consumers
 - consumers and decomposers
 - decomposers and scavengers
- An important dinosaur discovery by Joseph Tyrell sparked interest in the Badlands of Drumheller. The Royal Tyrell Museum of Paleontology was built for the 70-million-year-old dinosaur skull he named ...
 - Albertosaurus
 - Tyrannosaurus Rex
 - Apatosaurus
 - Brachiosaurus

4.3 Geologic Time

- The general time periods that organize the history of the Earth are called ...
 - eras
 - periods
 - years
 - centuries
- In the Geologic Time Scale, dinosaurs ruled the land and then became extinct during this era.
 - Precambrian
 - Paleozoic
 - Mesozoic
 - Cenozoic
- Scientists have inferred that there might be some relationship between dinosaurs and birds from some of the Archaeopteryx fossils they discovered a few impressions of feathers
 - wings
 - feathers
 - webbed feet
 - hollow bones