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## Age of Earth



## Across

4. A fossil formed when minerals replace all or part of an organism.
5. A fossil that is used to establish the age of a rock layer because the fossil was distinct, abundant, and widespread and the species that formed that fossil existed for only a short span of geologic time.
6. The breakdown of a radioactive element, releasing particles and energy. 13. A crablike invertebrate that is the most common fossil of the Cambrian Period, used as an index fossil.
7. The actual age in years of an event or object.
8. Method of determining the age of a fossil by comparing its placement with that of fossils in other layers of rock.
9. A copy of an organisms shape created when minerals fill and harden inside a mold.
10. Assigning an age to the Earth (4.6 billion years old) and landforms on the Earth through the use of two different methods relative dating and absolute dating.
11. A type of rock that forms when particles from other rocks or the remains of plants and animals are pressed and cemented together. Type of rock where fossils can be found.

## Down

1. A type of fossil that is an extremely thin coating of carbon on rock. Forms when sediment buries an organism and materials that make up the organism become gases which leave carbon behind.
2. A fossil formed when an organism buried in sediment dissolves, leaving a hollow area.
3. A technique used to determine the actual age of a fossil on the basis of the amount of a radioactive element it contains, as a result radioactive decay.
4. A preserved remnant or impression of an organism that lived in the past.
5. A scientist who studies fossils to learn about organisms that lived long ago.
6. Any indirect evidence of life preserved as an impression in rock; trails, footprints, tracks, burrows, and bite marks.
7. The age of a rock compared to the ages of rock layers.
8. A fossil that forms when the organisms or parts of organisms are prevented from decaying by being trapped in ice, tar, or amber.
9. The time it takes for half of the radioactive atoms to decay.
