

Name: \_\_\_\_\_ Per. \_\_\_\_\_

## Geologic Time Web Activity

Go to the Understanding Geologic Time website by the University of California Museum of Paleontology

(<http://www.ucmp.berkeley.edu/education/explorations/tours/geotime/gtpage1.html>).

Answer these questions as you follow the prompts on each page.

1. The Earth and moon formed \_\_\_\_\_ years ago.
2. The dinosaurs became extinct \_\_\_\_\_ years ago.
3. How is relative age different than the actual date (absolute age) of an event?

4. How do scientists determine the relative age of a rock or fossil?

5. Which came first, trilobites or ammonites? \_\_\_\_\_  
How did you know?

6. What can radiometric dating tell us about the age of rocks that the Law of Superposition cannot?

7. The 4 **eons** of the geologic time scale are:

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8. Which **era** could be called the "Age of the Dinosaurs"? \_\_\_\_\_

9. In which **period** did humans finally appear? \_\_\_\_\_

10. The divisions of time in the Geologic Time Scale represent \_\_\_\_\_  
\_\_\_\_\_.

When you finish all 10 sections of the Geologic Time website and answer the 5 questions, click on the link to “Visit the UC Museum of Paleontology home page”. <http://www.ucmp.berkeley.edu/exhibit/geology.html> Explore this area and see if you can discover the answers to these questions.

1. In 1669, \_\_\_\_\_ described two basic geologic principles. The first stated that sedimentary rocks are laid down in a horizontal manner (the law of original horizontality), and the second stated that younger rock units were deposited on top of older rock units (law of superposition).
2. How were the Cenozoic, the Mesozoic, and the Paleozoic Eras named?
3. Oxygen first began building up in the atmosphere in the \_\_\_\_\_ eon.
4. What is the principle of faunal succession?
5. The Cambrian period began with the breakup of the world-continent called \_\_\_\_\_ and ended with the formation of \_\_\_\_\_, as the Earth's continents came together once again.
6. Between which two periods was the largest mass extinction of life?  
\_\_\_\_\_ and the \_\_\_\_\_
7. Name 6 groups of organisms that survived the Cretaceous-Tertiary extinction.
8. What was Charles Lyell's big contribution to science?
9. Why do no rocks exist from the Hadean eon except meteorites?
10. Why is it thought that there are so many carnivores trapped in the La Brea tar pits and so few herbivores?

When you finish- Check out these other sites about the Geologic Time Scale

- [The Geologic Time Machine](#) links the periods to good descriptions and graphics for each time period, or go to their main page [here](#).
- US Geological Survey's [The Geologic Time Scale](#) gives brief descriptions of each period.
- [Artist Douglas Henderson](#) has created some illustrations of various geologic time periods.
- [Life Through Geologic Time: A Pictorial History of Life on Earth](#) includes summary information about time periods as well as images. This site also includes information about major impact craters (meteors) on Earth during each period.
- [The Paleomap Project](#) has some great maps (of course) as well as some good information.
- The [Geologic Timescale](#) offers a good chart and details about each time period.
- If your time period includes dinosaurs, [dinosauria.com](#) may be for you.
- Check for extinctions during your time period at [Minor Extinctions in Earth History](#).
- The [Five Worst Extinctions in Earth's History](#) at space.com is another extinction source. Close the pop-up windows as they appear.
- Geologic Time Scale:
- <http://www.ucmp.berkeley.edu/education/explorations/tours/geotime/index.html>
- <http://www.ucmp.berkeley.edu/education/explorations/tours/geotime/guide/geologictimescale.html>
- <http://www.agiweb.org/news/evolution/geologictime.html>
- <http://www.ucmp.berkeley.edu/help/timeform.html>
- Overview of Earth History:
- [http://www.windows2universe.org/earth/past/geologic\\_time.html&edu=high](http://www.windows2universe.org/earth/past/geologic_time.html&edu=high)
- <http://www.pbs.org/wgbh/nova/beta/evolution/brief-history-life.html>
- Precambrian Time Links:
- Proterozoic Era: <http://www.ucmp.berkeley.edu/precambrian/proterozoic.html>
- Archaean Era: <http://www.ucmp.berkeley.edu/precambrian/archaeon.html>
- Hadean Era: <http://www.ucmp.berkeley.edu/precambrian/hadean.html>
- Paleozoic Era Links:
- [http://www.windows.ucar.edu/tour/link=/earth/geology/hist\\_paleozoic.html&edu=mid](http://www.windows.ucar.edu/tour/link=/earth/geology/hist_paleozoic.html&edu=mid)
- [http://www.windows2universe.org/earth/geology/hist\\_paleozoic.html&edu=high](http://www.windows2universe.org/earth/geology/hist_paleozoic.html&edu=high)
- <http://www.ucmp.berkeley.edu/paleozoic/paleozoic.html>
- Mezozoic Era Links:
- [http://www.windows.ucar.edu/tour/link=/earth/geology/hist\\_mesozoic.html](http://www.windows.ucar.edu/tour/link=/earth/geology/hist_mesozoic.html)
- [http://www.windows2universe.org/earth/geology/hist\\_mesozoic.html&edu=high](http://www.windows2universe.org/earth/geology/hist_mesozoic.html&edu=high)
- <http://www.ucmp.berkeley.edu/mesozoic/mesozoic.html>
- Cenozoic Era Links:
- [http://www.windows.ucar.edu/tour/link=/earth/geology/hist\\_cenozoic.html](http://www.windows.ucar.edu/tour/link=/earth/geology/hist_cenozoic.html)
- [http://www.windows2universe.org/earth/geology/hist\\_cenozoic.html&edu=high](http://www.windows2universe.org/earth/geology/hist_cenozoic.html&edu=high)
- <http://www.ucmp.berkeley.edu/cenozoic/cenozoic.html>