

**Timeline of Life on Earth- March 2019 Update**  
**BI30-OL2**

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As we begin to discuss the concept of evolution in class it is important to understand the vastness of the timeline that we will be condensing to three weeks of study.

**Big Idea:** Evolution is the end result of small changes that occur between generations of organisms. Over long periods of time, these small changes eventually produce new species that are different from their ancestors. Students often underestimate the amount of time it takes for these changes to occur.

Your task is to develop a timeline that represents the major evolutionary changes seen during the 4.6 billion years of earth's history- and- new for this year- adapt it to an object of your choosing. As an example: You may choose to condense the timeline of the earth to a twenty-four hour day. 0:0:01 would be the creation of the earth, 4A.M. would be rise of simple cells, 1 P.M. would be eukaryotic cells, 6:30 P.M. would be multicellular organisms... and so on.

You must include the following information:

- Creation of earth
- The first simple cells
- The first complex cells
- The first multicellular organisms
- The first organisms to photosynthesize
- The colonization of land
- Track the evolution of green plants (you choose the relevant species and dates: mosses, trees, flowers ect.)
- Track the evolution of animals (you choose the relevant species and dates: jellyfish, sharks, birds ect.)
- The rise, domination, and fall of the dinosaurs (student interest)
- Track the evolution of hominids and humans
- The five known mass extinction events... and what changed/lived

I have posted one video:

<https://www.youtube.com/watch?v=sjE-Pkjp3u4>

And two websites:

[http://www.bbc.co.uk/nature/history\\_of\\_the\\_earth](http://www.bbc.co.uk/nature/history_of_the_earth)

<http://www.enchantedlearning.com/subjects/dinosaurs/glossary/Period.shtml>

To our class webpage to help you locate useful information.

Pretty this up: use pictures, use computer programs, use anything you think will help show the overall progression. We are going to follow these evolutionary branches and trends as we begin to look at the bacteria, plants, animals, fungi and prokaryotes that make up our earth.