



March Across Time Group Project (50 points)

Due: Thursday 10/8

Objective: Construct a timeline based on the origin of life as described in the chapter from Bill Nye's book Undeniable.

Procedure:

After reading/listening to Bill Nye's "A March of Time" (page 32-38) from his recent book Undeniable, construct a timeline of major events on earth. Use the dates and events listed on the back page to make your timeline.

Make sure to use proper scale (example: ruler, map of Falmouth, calendar, clock etc). You may not use California to Boston.

Each group will orally present the final product, explaining the time and distances. You will have two class periods to design and construct your timeline. Each group member must be involved in the process and presentation.

Grading Rubric:

Total points possible: 50

- 10 points The timeline has all of the correct dates and events
- 10 points The timeline has appropriate scale
- 10 points The timeline is creative, neat, and colorful
- 10 points Group members worked well together and worked diligently during in-class time
- 10 points Oral presentation

*Use at least 10 of these events/dates in your timeline. You must use the ones in a box.

4.6 billion years ago	The origin of the Earth
3.8 billion years ago	First life arises
2.1 billion years ago	Eukaryotes evolved
1.1 billion years ago	First sexually reproducing organisms
570 million years ago	First arthropods evolve
530 million years ago	The first fish
475 million years ago	First land plants
385 million years ago	First forests
370 million years ago	The first amphibians
320 million years ago	The earliest reptiles
225 million years ago	The dinosaurs evolve
200 million years ago	The mammals evolve
150 million years ago	First birds
130 million years ago	Flowering plants evolve
100 million years ago	The first bees evolve
65 million years ago	Dinosaurs and ammonites become extinct
14 million years ago	The first great apes appear
2.5 million years ago	Genus Homo evolves
200 thousand years ago	Our species, Homo sapiens evolves
10 thousand years ago	End of the last Ice Age

Notes on the Origins of Life and Deep Time
Undeniable, by Bill Nye Pages 32-38



1. Earth, and all of the living and non-living things that it is made of, has been in existence for a very, VERY long time. The term _____ is used by scientists to describe the magnitude of this enormous timescale.

2. Earth was formed approximately _____ **billion** years ago.

3. Evidence of the first forms of life (single-celled _____) dates back to _____ **billion** years ago.

4. How old are you?

5. How many of your lifetimes would fit into Earth's lifetime?