

Millions of Years Ago

Activity

Over Earth's lifetime, its layers have shifted around horizontally and also vertically. Meanwhile, organisms began emerging and spreading into different parts of the world, responding and adapting to the global climate and local environmental conditions. Scientists can only catch a glimpse of what the Earth was like before our time. They do this through analysis of evidence, such as fossilized and preserved remains of organisms. Based on where and in what condition a fossil was discovered, scientists try to piece together the puzzle of life.



Procedure:

1. Use this timeline in table form to record your data.

Color	Millions of Years Ago (MYA)	Era	Animals	Plants





Millions of Years Ago

Activity, continued

- Your group will receive a set of 18 color-coded blocks and one dinosaur toy. The blocks have information on them based on the fossil record. Each block represents a certain time period, Millions of Years Ago (MYA), and some of the types of plants and animals that first emerged during that time period.
- 3. Analyze the information provided on each block. Build a timeline by placing the blocks in chronological order, from oldest to most recent.
- 4. Using the sequence of data, fill in the information for plants and animals in your timeline table.
- 5. Review the timeline table and discuss where in the timeline that the dinosaur should be correctly placed, estimating when dinosaurs first emerged on Earth and when they went extinct.
- 6. Use your table data to draw a line as a different format for representing the timeline. Decide on what unit of measurement on the ruler will represent 1 Million Years, and then apply that to the timeline when marking off the MYA points.
- 7. Review your Fossil Card. This card describes an organism that went extinct during a particular Mass Extinction Event. Use your Student Reference Sheet and your timeline to analyze how that organism's extinction fits into the timeline of events.
- 8. Use the information you have been provided to explain:
 - a. why you think that organism went extinct, and
 - b. how its extinction may have affected surviving groups of organisms.
 - c. The similarities and differences in the causes of the many extinctions.

