

Geologic Time

Earth's Remarkable Past

32 page book, Sally Ride Science Key Concepts in Earth Science series, 2011, 6th grade level

In your World (Introduction)

Picture something old. Perhaps it's a famous old building. Perhaps it's a gnarled old tree. These might be hundreds of years old. That's pretty old, right? Now try to imagine something *billions* of years old. Our home, Earth, is 4.6 billion—yes, billion!—years old. That's so old, it's mind boggling.

Nearly one billion years passed before simple single-celled life took shape. Another 3 billion years went by before worms wiggled onto the scene. Insects didn't bug anything until about 400 million years ago. Dinosaurs? They didn't strike fear in the hearts of other animals until about 200 million years ago. And people? The sound of talking and laughter didn't echo across the land until a mere 200,000 years ago.

What is almost as mind-boggling is how anyone figured out when extinct animals like trilobites lived, when flowers first bloomed, and how long ice ages lasted. The clues are hidden in the rocks that cover Earth.

Remarkably, geologists worked out a detailed calendar of Earth's long history and named it geologic time. How? They combined dazzling detective work, real-life adventure, and cool chemistry.