HOW BIG IS ONE BILLION?

1,000,000,000

(one hundred million)
100,000,000
× 10
1,000,000,000

(ten million)
10,000,000
× 100
1,000,000,000

(one million)
1,000,000
× 1,000
1,000,000,000

(one hundred thousand)
100,000
× 10,000
1,000,000,000

ONE BILLION IS A BIG NUMBER. It's hard to understand how big it is, but one billion is the same as one thousand million. There has been life on earth for about 3.6 billion years, and all of the plants and animals there have ever been evolved during that time.

The first life was tiny, single-celled organisms, and these were all Earth had for billions of years. One billion years ago, multi-cellular life showed up, and 500 million years ago fish first evolved. Seventy-five million years after that, there were plants. The reptiles first evolved 300 million years ago. The dinosaurs ruled the Earth starting about 200 million years ago, and went extinct 66 million years ago. The very first mammals evolved around the same time as the dinosaurs.

In the last 100 million years, the dinosaurs went extinct, the very first primates arrived, and humans evolved from our early ancestors. The entire history of our species, *homo sapiens*, has only happened in the last 200,000 years. The amount of space that would take up on the graph to the right would not be visible to our eyes.

Imagine some of the species that have existed on Earth over the last billion years. Draw them along this graph.