We have been around only a very short time.
Amy Pollack

We are on a rocky, metallic planet composed of the dust of dead stars, orbiting a middle-aged star born of the same stardust some 5 billion years ago. Our sun may live another 5 or ten billion years but no more. It sits in an arm of a galaxy born some 10 billion years ago, in a universe born some 13.75 billion years ago. This drawing by my wife Amy asks that you think of each million years since that beginning of time as being a page in a book. Today that bookshelf would hold 30 volumes of 450 pages each.

The first 21 volumes would have nothing in them about life that we have found as a fossil. From fossil and sequence evidence, we can infer that the informational molecule DNA would have been born some time in that volume, because archeobacteria, the first forms of life, would appear in the seas in volume 22.

Bacteria would continue to be the only shape life took for volumes 23 and 24 as well, though the ones emerging in volume 24 would change the planet's atmosphere to one rich in Oxygen, by bacterial photosynthesis.

Big-celled forms of life like paramecia and diatoms would appear for the first time in volume 25.

Living things made of many big cells would appear in volume 27.

Animals would remain in the seas where life had begun until the first forms of animal life on land—the first tetrapods—march on shore at the end of volume 29.

Dinosaurs would appear in the middle of volume 30. They would for the most part be wiped out by an asteroid on page 385.

Only the last 65 pages of the last volume would have anything to say of significance about mammals, like the cat.

The last ancestor of both us and our nearest relative, the chimp, would have lived and died only by page 440. From that ancestor many other ancestral hominoid species would follow, each coming and going in the last ten pages.

We humans would have a note about our emergence in Africa, on the last tenth of the last page of that last volume.

And then, somewhere toward the last sentence so far, would be the emergence of language, texts and, in that mental world, thoughts of imagined and imaginary creatures like *Alice in Wonderland*.

The period at the end of that sentence, would hold the time since science took hold of our imaginations as a way to understand all this.

—Bob Pollack, 2007