

Transcript

What is time?

In a world where clocks abound, we constantly ask, “what time is it?” But rarely do we stop to consider, “what is time?”. In the July 25th Science News, our staff writers tackle this question. They take a look at time from three completely different perspectives: body, brain and universe.

When it comes to the body's clock, biologists ponder time from the perspective of evolutionary history. They want to know how and why life-forms acquired internal clocks that guide everyday life. Molecular biology writer, Tina Hesman Saey, explores the circadian clocks built into nearly every one of ourselves and how they relate to the most primitive clocks found in archaea and algae.

Our brains take on time is a separate story. Neuroscience writer, Laura Sanders explores how the clocks in our heads help us make sense of the world, and what makes our perception time appear to change as a consequence of our experiences. There are even some hints about how faulty timekeeping in the brain can factor into disorders such as schizophrenia.

Perhaps the most brain boggling exploration of time comes from physics writer, Andrew Grant. He grapples with time in terms of grab and the grandeur of the universe. Why does time always run forward even though the laws of physics should permit its tick backward? A new simulation points to gravity and suggests that the force may allow the universe to have one past: the big bang and two futures. You can read about these explorations of time and more at www.sciencenews.org/time.