How did Life begin on Earth? | Mystery of our Origin |

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Origin of Life on Earth

Last Universal Common Ancestor

Evolution from Non-Living to Living

Complexity and Metabolism in Life

The Spectrum of Life Emergence

Panspermia Theory and Life's Building Blocks

The Origin of Life on Earth: A Complex Puzzle

The origin of life on Earth is a fundamental question that has puzzled scientists and philosophers for centuries it calcomplex problem that requires an interdisciplinary approach, incorporating concepts from biology, chemistry, physics, and geology. In this summary, we'll delve into the key ideas that theories that it mpt to explain how life emerged on our planet.

Primordial Soup Hypothesis

The most widely accepted theory is the primordial soup hypothesis, which proposes that life arose from a mixture of organic compounds in the early Earth's oceans. These compounds, rich in carbon, hydrogen, oxygen, and nitrogen, eventually assembled into more complex structures, such as amino acids, nucleotides, and lipids.

Miller-Urey Experiment

In 1953, Stanley Miller and Harold Urey conducted a groundbreaking experiment to test this hypothesis. They simulated the early Earth's atmosphere, consisting of water, methane, ammonia, and energy from