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THEORIES THAT EXPLAIN THE ORIGIN OF LIFE

Life on earth began more than 3 billion years ago, evolving from basic microbes to complex organisms over time. Below are some of the theories that explain the origin of life;

1) PANSPERMIA

The theory suggests that life on earth originated from microorganisms and chemical precursors of life present in outer space, a notion known as **panspermia**, and able to initiate life on reaching a suitable environment in the earth.

2) SIMPLE BEGINNINGS

It suggests that life began with smaller molecules interacting with each other in cycles of reactions. This must have been contained in simple cell membranes and over time more complex molecules performed these reactions and life evolved.

3) PRIMORDIAL SOUP

The theory states that a young earth possessed a reducing atmosphere and following exposure to different forms of energy, basic compounds were formed. These compounds are then said to have accumulated in soup, then life evolved.

4) CHILLY START (BENEATH THE ICE)

It suggests that ice must have covered the ocean and as the sun was about a third as luminous as it is now, it might have possibly protected fragile organic compounds below from ultraviolet and cosmic impacts.

5) COMA UNITS CLAY

It suggests that the original molecules of life formed within clay. It suggests that as clay crystallizes, sticks together and is capable of bringing more clay and just start a mechanism for selecting replicating materials forming life.

6) ELECTRIC SPARK

Electric sparks can generate amino acids and sugar from an atmosphere loaded with water, methane, hydrogen and ammonia. Lightning might have helped in creating the key building blocks of life.

7) DEEP SEA EVENTS

It suggests that life began in submarine hydrothermal events with spewing key hydrogen molecules. Their rocky nooks would have therefore concentrated these molecules and therefore provided mineral catalyst for critical reactions that formed life.

8) RNA WORLD

DNA and proteins are created by RNA which acts as an enzyme and stores information like DNA. The main role of DNA is to store information on how other molecules should be arranged. Genetic sequences in DNA and proteins are essentially instructions on how amino acids should be arranged in proteins.