

HYDROISIA

In our created world, Hydroisia, we are creating a planet completely covered by oceans, where life forms can independently satisfy their vital needs. The term “Ocean World” refers to planets that are largely covered by water and provide the necessary conditions for life to exist. Such worlds are composed of essential elements, energy sources and favorable temperature conditions, creating a beautiful space to explore the potential for life in the universe.

On ocean worlds, living conditions can thrive through alternative methods of energy production, such as chemosynthesis. This process allows organisms to use inorganic compounds found in deep-sea ecosystems to produce energy without the need for sunlight. Chemosynthesis, for example, involves the conversion of inorganic substances into organic compounds by organisms, usually using energy sources such as hydrogen sulfide, methane, ammonia, and iron. This process occurs primarily in sunlight-deprived environments such as hydrothermal vents on the ocean floor and some terrestrial soils.

In an oxygen-free ocean world, life is sustained by the production of energy by chemosynthetic bacteria. These microorganisms form the base of the food chain and serve to evolve more complex organisms that form symbiotic relationships with them. Bioluminescent organisms produce light through chemical reactions, facilitating communication in the dark depths of the ocean. Such an environment demonstrates that alternative life forms and complex ecosystems can exist.

In our imagined world, there is no land or oxygen, just a vast ocean. Within this ocean, events such as explosions and holes occur. Even though there is no land, things like winds, temperature fluctuations, changes in gas compositions and chemical reactions continue to happen. Temperatures are also very low in this World because there is no source of sunlight.

Among the creatures in this ocean are unique species of life such as the Saltini, Calore, Sulphidro and various archaea. Saltini thrive by extracting salt from seawater and create their own food. Calore is a bacterium that multiplies as the temperature drops. Sulphidro, which feeds on sulfur bacteria, coexists with archaea in this ecosystem. These species represent just a fraction of the diverse life forms that have evolved to survive in an environment deprived of oxygen and light, and have developed unique feeding strategies to adapt to their harsh environment.

In summary, this oceanic world, devoid of sunlight and land, demonstrates the extraordinary adaptability of life in extreme conditions and reveals the potential for diverse ecosystems to thrive in the vastness of the universe.