

Healthy Oceans

Coral Reefs and Climate Change

Vocabulary for Students



- **Adaptation:** A behavior or physical characteristic that allows an organism to survive or reproduce in its environment.
- **Biodiversity:** Bio=biological. Diversity=a variety of things. The different kinds of plants, animals and other organisms in an area.
- **Carbon dioxide (CO₂):** A chemical compound composed of two oxygen atoms bonded on either side of a carbon atom. CO₂ is one of the most significant greenhouse gases in Earth's atmosphere.
- **Coral bleaching:** When corals are stressed by changes in conditions such as temperature, light, or nutrients, they expel the symbiotic algae living in their tissues, causing them to turn completely white.
- **Coral reef:** A structure of calcite skeletons built up by coral animals in warm, shallow ocean water. Coral reefs are one of the most diverse ecosystems on Earth.
- **Fossil fuel:** An energy-rich substance such as petroleum, coal, or natural gas formed from the remains of ancient organisms.
- **Climate change:** Changes in the average long-term conditions of temperature, precipitation, winds, and clouds in an area.
- **Greenhouse gases:** Gases in Earth's atmosphere that absorb infrared radiation and trap heat. Some greenhouse gases are naturally occurring compounds (like water vapor, carbon dioxide, methane, and nitrous oxide), while others are human-made (like gases used for aerosols).
- **Ocean acidification:** The process by which atmospheric carbon dioxide dissolves in seawater, causing a decrease in the water's pH and an increase in the ocean's acidity.
- **Twilight zone:** Also called the 'mesophotic zone' (meso='middle'; photic='light'), this is the narrow band of depth in the ocean between 200-500 feet beneath the surface characterized by low light availability. The twilight zone is beyond safe recreational diving limits, but far above the deep regions of the ocean where scientists explore with submarines and ROVs (remotely operated vehicles), which might make it one of the least explored regions on Earth.

