

# Climate Change Vocabulary

<b>Arctic</b>	The Arctic is a vast, ice-covered ocean, surrounded by tree-less, frozen ground. This habitat is home to organisms living in and on the ice including fish, marine mammals, birds, land animals, and human societies.
<b>Atmosphere</b>	The mixture of gases and aerosols – the air – that surrounds the Earth in layers protecting us from the sun’s powerful ultraviolet (UV) radiation, and even from meteors. The atmosphere extends up to 20 miles above the Earth.
<b>Carbon Dioxide (CO<sub>2</sub>)</b>	A heavy, colorless atmospheric gas. It is emitted during respiration by plants and by all animals, fungi, and microorganisms that depend either directly or indirectly on plants for food. CO <sub>2</sub> is also generated as a byproduct of the burning of fossil fuels or vegetable matter. CO <sub>2</sub> is absorbed from the air by plants during their growth process. It is one of the greenhouse gases.
<b>Climate</b>	The average weather for a particular region over an extended time period. In other words, climate is the weather you would expect to have in a particular region.
<b>Climate Change</b>	Major changes in temperature, rainfall, snow, or wind patterns lasting for decades or longer. Climate change may result from both natural processes and/or human activities.
<b>Emissions</b>	The act or instance of discharging (emitting) something into the air, such as exhaust that comes out of the tail pipe of a car or a smokestack.
<b>Fossil Fuels</b>	Fossil fuels are natural substances made deep within the Earth from the remains of ancient plants and animals. Over time, heat and pressure turned the decomposing remains into substances that act as fuel to release energy when burned. Coal, oil, and natural gas are the three main fossil fuels.
<b>Global Warming</b>	An increase in the Earth's average temperature, which in turn causes changes in climate. This increase in temperature is caused mainly by an increase in greenhouse gases like carbon dioxide and methane in the atmosphere.
<b>Greenhouse Effect</b>	The effect produced by greenhouse gases allowing incoming solar energy to pass through the Earth’s atmosphere, but preventing most of the outgoing heat from escaping into space. The natural greenhouse effect is necessary to maintain life on earth, as it keeps the Earth 60°F warmer than it would be without the presence of these gases.
<b>Greenhouse Gases</b>	Gases such as water vapor, carbon dioxide, methane, and nitrous oxide that allow incoming solar radiation to pass through the Earth’s atmosphere, but prevent most of the outgoing infrared (heat) radiation from the surface and lower atmosphere from escaping into outer space. Greenhouse gases are present in the atmosphere from both natural processes and human activities such as burning fossil fuels and driving cars.
<b>Solar Radiation</b>	The energy emitted by the sun. This energy can be seen and felt as heat in the sun’s rays.
<b>Weather</b>	The specific condition of the atmosphere at a particular place and time. It is measured in terms of such things as wind, temperature, humidity, atmospheric pressure, cloudiness, and precipitation. In most places, weather can change from hour-to-hour, day-to-day, and season-to-season.