

### Climate Literacy Vocabulary:

**Climate:** The interaction of land, water and air for the entire planet over an extended period of time.

**Weather:** The specific condition of the atmosphere in a particular location or season.

**Scientific Method:** A method of research in which a problem is identified, information is gathered; a hypothesis is formulated and then tested.

**Paleoclimatology:** The study of changes in climate taken on the scale of the entire history of Earth

**Meteorology:** The branch of science concerned with the process and study of the atmosphere

**Oceanography:** The branch of science concerned with the physical and biological properties of the ocean.

**Ocean Acidification:** The effect of the increased CO<sub>2</sub> levels in the ocean. When carbon dioxide enters the ocean it combines with seawater to produce carbonic acid. This increases the acidity of the water and lowers its pH

**Geology:** The branch of science that deals with the earth's physical structure and substance, its history and the processes that act on it.

**Carbon Cycle:** The process by which carbon dioxide is incorporated into plant tissue and respired back into the atmosphere by animals

**Greenhouse Effect:** Trace gases, like CO<sub>2</sub>, in our atmosphere allow solar energy to pass into the atmosphere and retain outgoing heat from escaping into space. The greenhouse effect is necessary to maintain the earth's temperature.

**Climate Change:** The flux or variation in the interaction of the earth's systems of land, water and air over a long period of time. While it is both a man made and natural phenomenon climate change commonly refers to the human influenced impacts on climate.

**Atmosphere:** The air. The mixture of gases that surround the earth in layers and both holds and protects us from the sun's radiation. The atmosphere extends 20 miles above the earth

**Carbon Dioxide:** CO<sub>2</sub>, a heavy colorless atmospheric gas. It is one of the greenhouse gases. It is absorbed from the air by plants during their growth process and respired by animals. CO<sub>2</sub> is also generated as a by-product of burning fossil fuels.

**Emissions:** The act of discharging something, like exhaust from the tail pipe of a car into the air.

**Fossil Fuel:** Coal, oil and natural gas are the three primary fossil fuels. They are natural substances made deep within the earth from the remains of plants or animals. Over time heat and pressure turn the decomposing remains into a substance that acts as fuel to release energy when burned.

**Global Warming:** An increase in the earth's average temperature based on changes in climate. The change is caused primarily by an increase in greenhouse gases like CO<sub>2</sub> in the atmosphere.

**Solar Radiation:** The energy emitted by the sun.

**Renewable Energy:** Power from a source that is not depleted like wind, solar and geothermal and whose impact does not adversely affect the climate.

**Infrastructure:** The basic physical and organizational structures and facilities (like roads) needed for the operation of society.

**Collective Action:** An action taken together by group of people whose goal is to enhance achieve a common objective.

