



Vocabulary Words



Middle School

Atmosphere – A layer of molecules and other particles between outer space and the Earth. The atmosphere protects the Earth against harmful rays from the sun and space debris like meteors.

Biodegradable – Anything that can be broken down by living organisms, such as bacteria, and returned to the earth. Bread and cherry pits are biodegradable; Styrofoam and plastic are not.

Biofuel – A term given to harvesting energy from biodegradable plant material. Biofuels do not produce any more carbon dioxide than they consume, so they do not contribute to global warming.

Carbon Dioxide – Commonly written as CO₂. It is a molecule that is released when we burn many fossil fuels, especially coal. While it is the most common greenhouse gas, a certain amount is also necessary for our survival because plants use carbon dioxide to make the oxygen we breathe.

Carnivore – An animal that eats only meat.

Compost – A collection of biodegradable waste that is no longer used by people or which died on its own. Examples are banana peels, coffee grounds, or leaves and branches. When mixed together they form a substance rich in nutrients which many people use to fertilize their gardens.

Consumption – To eat or take in (you consume food and water), or to use (people consumes energy when they watch television or drive a car).

Ecological Footprint – A way of measuring how much of an impact a person or community has on the Earth. Someone who uses more natural resources will have a bigger footprint than someone who uses less.

Ecosystem – A grouping of plants, animals, water, air and land that all dependent on each other for survival.

Energy – A way to describe the use of power. Electricity is a form of energy usually created by fossil fuel. It can also mean the capacity to do work.

Energy Star – This Environmental Protection Agency project awards the Energy Star label to appliances meeting specific efficiency requirements. Appliances like dishwashers and heaters that have the Energy Star label use less energy than others while doing the same amount of work.

Environment - This word can mean many different things. It can mean the area around you, or it sometimes just means nature. When we speak of protecting the environment, we usually mean we want to protect plants and animals, or we want to clean up the water and air.

Erosion – The term used to describe what happens – when topsoil is washed or blown away and plants and crops do not grow easily.

Fossil Fuels – Fossil fuels come from organisms like dinosaurs that lived long ago and have been buried underground for many years. People use fossil fuels like gas, coal, and oil to create the energy that power our cars, homes, and factories. There is a limited amount of fossil fuel on the Earth, and fossil fuels produce pollution when we use them for energy.

Fuel Cell – A device that turns hydrogen into fuel. It is very efficient and very clean, but is currently too expensive for mass marketing.

Geothermal Energy – Energy we get directly from the Earth, usually in the form of heat. Volcanoes are a good source of geothermal energy.

Global Warming – Also known as the “Greenhouse Effect”. Most scientists believe global warming is happening right now. When too many greenhouse gasses such as carbon dioxide and methane are trapped in the atmosphere, the temperature on the Earth rises causing the ice at the north and south poles to melt. This raises the water level in the oceans and different places on the earth slowly get hotter or colder. If it goes on long enough, global warming could change rainforests to deserts and dry areas to wet ones.

Greenhouse Gas – The term given to any gas that traps heat in the atmosphere. It does this by letting the sun’s energy through, but not back out – like a glass window. Common greenhouse gasses are carbon dioxide and methane.

Herbivore – An animal that eats only plants.

Hybrid Car – A car that runs on a combination of gasoline and electricity. This allows it to get more miles per gallon and makes it more environmentally friendly.

Hydroelectric Energy – The term given to energy derived from water, usually by damming a river.

Kyoto Treaty – This treaty was first drawn up in 1997. It requires countries who sign it to reduce their greenhouse gas emissions to levels below what they were producing in 1990. The United States, which is the world’s biggest producer of greenhouse gasses, has not yet signed it.

Methane - The most dangerous greenhouse gas because it traps the most heat in the atmosphere, which means it contributes the most to the Greenhouse Effect. It is emitted when things decompose, especially in landfills, or when we burn natural gas. Cows and other animals also emit it naturally as part of the digestive process.



Natural Gas - The cleanest fossil fuel because it produces half as much carbon dioxide as coal. If you have a gas barbeque, fireplace, or stove, it is using natural gas. Natural gas comes from under the Earth's surface.

Natural Resources – Materials used by people and industry which are found naturally on earth. Water, coal, trees, and fish are examples. We use natural resources in our daily lives when we eat, build, travel, and wear clothes.

Nonrenewable Energy – Energy sources that can be used only once or do not replace themselves. Fossil fuels like coal and oil are examples. Nonrenewable energy also has a limited supply.

Omnivore – An animal that eats both animals and plants

Organic Food – Food that is grown or made without fertilizers, hormones, or pesticides. Organic food is healthier for people and the environment.

Ozone Layer – A layer of the atmosphere that blocks ultraviolet rays from the sun. These rays have been known to cause skin cancer and cause global warming. Some pollutants can open holes in the ozone layer.

Recycle – The process of turning used items into new, often different items.

Renewable Energy – A term referring to anything capable of producing energy and that can be used over and over again. Water is an example. Renewable energy sources such as sunlight and wind power are not actually reused, but are so abundant that they are impossible to use up (inexhaustible). These forms of energy contrast with nonrenewable energy forms like coal, oil, and natural gas

Solar Energy – Energy that comes from the sun. Light from the sun can be caught by "solar panels" which turn the light into energy.

Sustainability – A term used to describe a situation where everyone on Earth lives in a way that does not exceed the amount of resources the Earth provides. This way of living would allow humans to live forever on the Earth with no major environmental consequences.

Topsoil – The layer of dirt closest to the surface of the Earth. Top soil is responsible for providing the nutrients that help plants grow.

Watt – A unit of measure that is used to determine how much energy something creates. A typical light bulb is about 60 watts

