

OUR EARTH

OUR RESPONSIBILITY



LET'S SAVE IT TOGETHER

masifunde

LEARNER DEVELOPMENT

What is CLIMATE CHANGE?

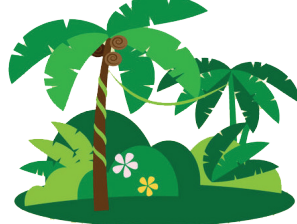
To understand Climate Change, let us first define what is Weather and what is Climate.

WEATHER



Weather is the state of the atmosphere at a particular place at a particular time or for a limited period of time (for example a Day or a Month).

CLIMATE



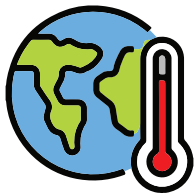
Climate - Is the average state of the weather at a particular place over a long period of time (several decades).

Therefore, Climate change refers to long-term shifts in temperatures and weather patterns. These shifts may be natural, but since the 1800s, human activities have been the main driver of climate change, primarily due to the burning of fossil fuels (like coal, oil and gas), which produces heat-trapping gases. www.un.org/en/climatechange/what-is-climate-change

For our relevance we will be looking at three topics that relate to Climate Change and what you can do about them:



Pollution



Global Warming



The 4Rs

Refuse, Reduce, Reuse & Recycle



Pollution

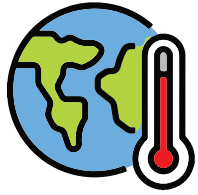
Pollution is the introduction of harmful materials into the environment. These harmful materials are called pollutants. Pollutants can be natural, they can also be created by human activity, such as trash or runoff produced by factories. Pollutants damage the quality of air, water, and land. Many things that are useful to people produce pollution. Cars spew pollutants from their exhaust pipes. Burning coal to create electricity pollutes the air. Industries and homes generate garbage and sewage that can pollute the land and water. Pesticides—chemical poisons used to kill weeds and insects—seep into waterways and harm wildlife.

The three major types of pollution are air pollution, water pollution, and land pollution.

- Sometimes, Air pollution is visible. A person can see dark smoke pour from the exhaust pipes of large trucks or factories, or even the fire we make for example. More often, however, air pollution is invisible but that does not make it any less dangerous.
- Some polluted water looks muddy, smells bad, and has garbage floating in it. Some polluted water looks clean, but is filled with harmful chemicals you can't see or smell. Polluted water is unsafe for drinking and swimming. Some people who drink polluted water are exposed to hazardous chemicals that may make them sick years later.
- Many of the same pollutants that foul the water also harm the land. Mining sometimes leaves the soil contaminated with dangerous chemicals.

Trash is another form of land pollution. Around the world, paper, cans, glass jars, plastic products, and junked cars and appliances mar the landscape. Litter makes it difficult for plants and other producers in the food web to create nutrients. Animals can die if they mistakenly eat plastic. Pesticides and fertilizers from agricultural fields are blown by the wind. They can harm plants, animals, and sometimes people. Some fruits and vegetables absorb the pesticides that help them grow. When people consume the fruits and vegetables, the pesticides enter their bodies. Some pesticides can cause cancer and other diseases.

www.education.nationalgeographic.org/resource/pollution



Global Warming

Global warming is the long-term warming of the planet's overall temperature. Though this warming trend has been going on for a long time, its pace has significantly increased in the last hundred years due to the burning of fossil fuels. As the human population has increased, so has the volume of fossil fuels burned. Fossil fuels include coal, oil, and natural gas, and burning them causes what is known as the "greenhouse effect" in Earth's atmosphere.

The greenhouse effect is when the Sun's rays penetrate the atmosphere, but when

that heat is reflected off the surface cannot escape back into space. Gases produced by the burning of fossil fuels prevent the heat from leaving the atmosphere. These greenhouse gasses are carbon dioxide, chlorofluorocarbons, water vapor, methane, and nitrous oxide.

The excess heat in the atmosphere has caused the average global temperature to rise overtime, otherwise known as global warming. Global warming has presented the issue called "Climate change". <https://education.nationalgeographic.org/resource/global-warming>



4Rs

One easy way to make sure that the eco-trend continues is to always remember the 4Rs. In this order of priority, remember to Refuse, Reduce, Reuse and Recycle.

- **REFUSE**- this means to say No. Refuse the use of plastic materials to help lower the impact of pollution. Be sure to take alternatives with you e.g., reusable straw, canvas bags etc.
- **REDUCE**- means to cut down. Could be to cut down the amount of litter you produce. This includes buying products in bulk, or with less packaging and choosing the most sustainable options or that are made from recycled products e.g., using canvas bags instead of plastic bags.
- **REUSE** means to use something again that you would normally throw away. When you reuse, you use fewer natural resources and also save the energy that is needed to make a replacement.
- **RECYCLE** means the product goes through a mechanical process to change its form. Recycling saves energy, resources and materials from creating brand new products. You can also separate rubbish/trash into types so that they are easy to sort and this way they can be sent to recycling banks. Here they will be taken to make new products. You can separate your rubbish/trash in the following trash bins: Plastic, Paper, Glass and Metal.



Activities

Match the columns - Match the words on the left column with their correct definition on the right column.



How can you use the 4R's towards solutions for Climate Change

Adaption

The release of a substance (usually a gas when referring to the subject of climate change) into the atmosphere.

Weather

A human intervention to reduce the human impact on the climate system.

Temperature

Refers to any significant change in the measures of climate lasting for an extended period of time

Emission

the presence in or introduction into the air of a substance which has harmful or poisonous effects.

Climate

The degree or intensity of heat present in a substance or object.

Mitigation

Is the state of the atmosphere at a particular place at a particular time or for a limited period of time.

Air Pollution

Adjustment or preparation of natural or human systems to a new or changing environment which moderates harm or exploits beneficial opportunities.

4Rs

REDUCE

To decline in size, amount, numbers or intensity

REUSE

To use something more than once

RECYCLE

To recover waste and process it into useful material

REFUSE

To be unwilling to accept

What can you do?

**Masifunde Learner Development
Learn4Life! Programme**

INVITES YOU TO

Walmer Community CLEAN UP

**Saturday
17 Sept 2022
09:00 am**

**Walmer High School gate,
Walmer Township
Gqeberha**

PPE to be provided (masks and gloves), Information stall along the route and prizes to be won!

For more information contact: 041 581 2543

