

NAME: Mr. Andrew N. Kariuki

SCHOOL: Ofafa Jericho High School
P.O. Box 45530
Nairobi

SAVE O₃UR SKY - BE OZONE FRIENDLY

Hallo people. Whom am I? Well, I exist as an allotropic condition of oxygen and in a state of condensation (having three atoms to the molecule, O₃). I have a peculiar pungent and refreshing smell. I am the ozone. Or in simpler terms I am one of the vital gases that compose the atmosphere.

I am very important for the planet earth. In harmony with my brothers and sisters who include carbon dioxide, water vapour, nitrous oxide, methane and chlorofluorocarbons (CFCs), I allow sunlight to pass through the atmosphere and warm the earth's surface. The earth in turn sends the heat energy back into the atmosphere as infrared radiation, much of this radiation does not go straight into space because some of my brother and sister gases in the atmosphere (and me) absorb and redirect it back to the earth, adding to the warmth of the earth. This process is crucial for regulating climates on earth and is known as the greenhouse effect. Although nitrogen and oxygen gas are the major compositions of the atmosphere they play almost no direct role in climate regulation, unlike me and my family.

Consider this, the earth and the moon lie at the same distance from the sun, so they receive in proportion about the same amount of heat from the sun, but while the earth is 59° Fahrenheit, the moon averages zero degrees Fahrenheit and is lifeless, because, it doesn't have the privilege of hosting me and my family who, hold some of the sun's warmth and let the rest escape. This warmth is vital for life on earth including human life.

Another reason why I am indispensable is protection. Protection from the deadly effects of sunlight. I do this together with my family by limiting the amount of sunlight reaching the earth, so that the amount of sunlight is just right for life to flourish on earth.

Humans have not been fond of me. They have worked to destroy me continuously. Humans have used sprays and perfumes which are CFCs based, killing me slowly. Manufacture of plastic foams and other industrial processes by humans produce CFCs, which not only trap heat but also decimate me.

Destroying me, what is commonly known as ozone depletion, is destroying the perfect interdependence of all life forms on earth. For example, excess sunlight can nurture cancer cells on people, leading to the deadly skin cancer!

I earlier said that climate regulation is another vital function of the ozone. Depletion of the ozone means altering the earth's climate to that of the moon's - a very inhospitable cold climate - too cold for our survival.

Great care should therefore be taken on what chemicals should be emitted in the atmosphere, because some gases e.g., from detergents and jetliners work to annihilate me. Apart from using sprays that have ozone friendly label, an effective step towards saving the sky is to limit the amount of gases emitted from manufacture of plastic foams and other industrial processes that bring about CFCs, as a result of this precaution, some production firms stand to lose billions of dollars because of cutting down production, for them, introduction of chemicals that can neutralise the harmful effects of dangerous gases that deplete me should be perfected.

I am one of the very best friend that mother nature has provided, in me lies all the necessities of all life forms on earth. Save me I'll save you.
