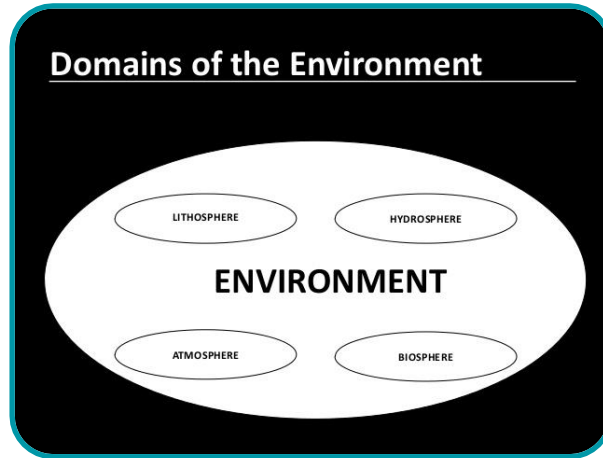


WELCOME TO VIRTUAL CLASS STD VII

**SUBJECT : GEOGRAPHY
CHAPTER NUMBER: 4
CHAPTER NAME : THE ATMOSPEHER**

CHANGING YOUR TOMORROW

The Atmosphere



Learning Goals:

1. Composition of Air
2. Layers of Atmosphere
3. Role of gases in air
4. Role of Atmosphere

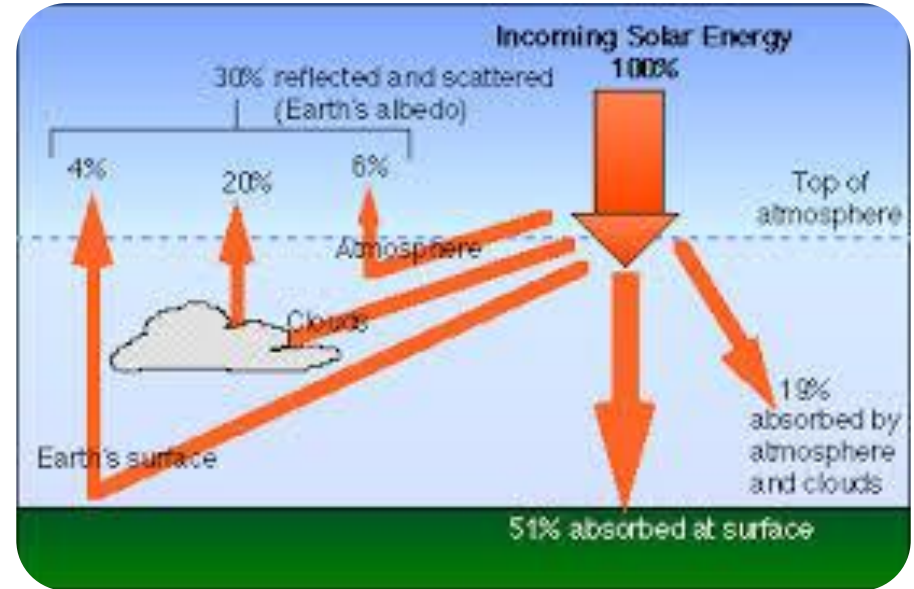
Atmosphere The thick envelope of air surrounding the earth is called the atmosphere. It is one of the natural components of the environment. The survival of all the living beings on this planet depends on the atmosphere.

Functions of Atmosphere:

- It provides us the air we breathe.
- It protects us from the harmful effects of sun's rays.
- It prevents the earth from becoming too hot or too cold.

What is Earth energy balance?

The earth-atmosphere energy balance is the balance between incoming energy from the Sun and outgoing energy from the Earth. When it reaches the Earth, some is reflected back to space by clouds, some is absorbed by the atmosphere, and some is absorbed at the Earth's surface.



Composition of Air

The air that we breathe is a mixture of many gases like oxygen, nitrogen, carbon dioxide, argon etc. The majority of the atmosphere is made up of nitrogen (78%) and oxygen (21%). The other gases that are present in small quantities are: Carbon dioxide (0.03%), Argon (0.93%) and Others (helium, hydrogen, ozone). Tiny dust particles are also present in the air, apart from the above gases.

composition of air

Nitrogen: It is the gas that is most abundant in the air. Plants need nitrogen to make protein. Plants cannot take the gaseous nitrogen from air. Some bacteria live in soil and in roots of some plants. These bacteria take the nitrogen from air and change it to a form so that plants can utilize nitrogen.

Oxygen: It is the second most plentiful gas in the air. Oxygen plays an important role for human beings, animals and plants in the following ways. Most of the living beings need oxygen for respiration. Green plants produce oxygen during photosynthesis.

The consumption of oxygen by human beings and animals is replenished by the production of the same by plants. Hence, the oxygen content in the air remains balanced. Indiscriminate felling of trees disturbs this balance.

Carbon dioxide: It is another important gas. Green plants need carbon dioxide to carry out photosynthesis. Most of the living beings release carbon dioxide during respiration.

Photosynthesis is a process used by plants and other organisms to convert the light energy, normally from the Sun, to chemical energy that can be later released to fuel the organisms' activities.

CONCEPT OF GLOBAL WARMING

- “**Global warming** is a gradual increase in the earth's temperature generally due to the greenhouse effect caused by increased levels of carbon dioxide, CFCs, and other pollutants. “

Causes of global warming

There are many causes of global warming.

Most important causes are:

- 1. Deforestation.**
- 2. Industrialization.**
- 3. Burning of fossil fuels.**
- 4. Decay of dead organisms.**
- 5. Respiration/ breathing of living organisms.**
- 6. pollution of Automobile**
- 7. Thermal power plant**
- 8. Cultivation of land.**
- 9. Eruption of volcanoes (a mountain with a large circular hole at the top through which lava, gases, steam and dust are forced out)**
- 10. Domestic cooking**

THANKING YOU
ODM EDUCATIONAL GROUP