

Class VII – Geography

Chapter 4 : Air

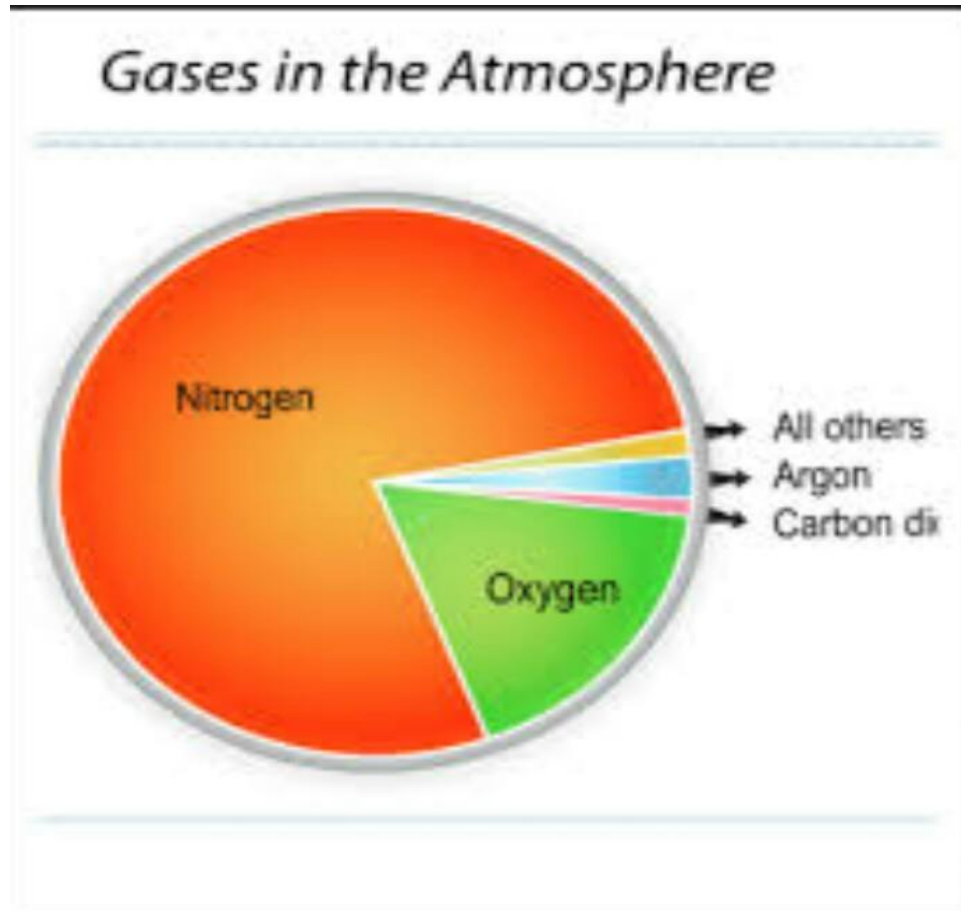
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MEANING OF ATMOSPHERE

- Our Earth is surrounded by a huge blanket of air called atmosphere.
- Atmosphere provides us the air we breathe and protects us from harmful rays of Sun.

COMPOSITION OF AIR

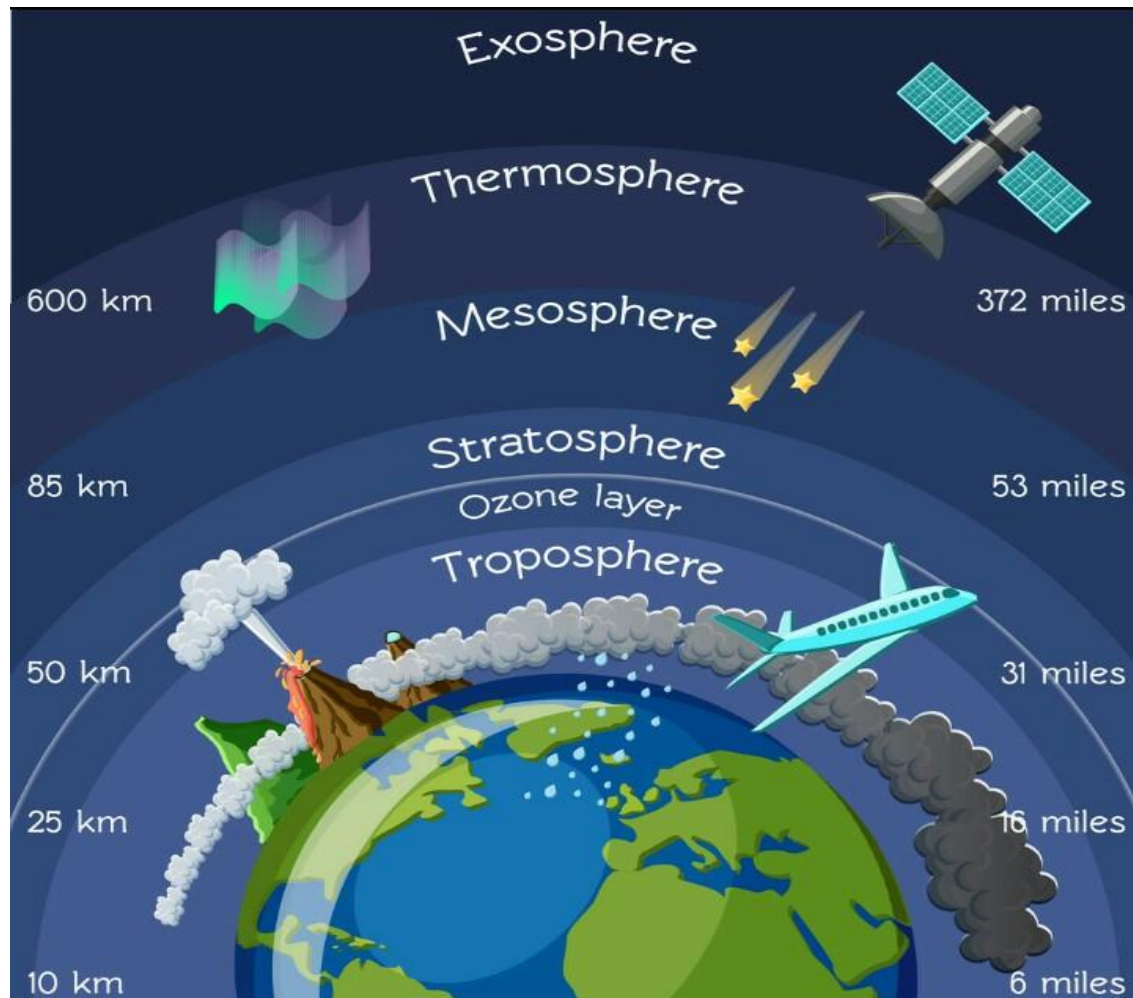


SIGNIFICANCE OF ATMOSPHERE

- OXYGEN- It helps us to sustain life on earth.
- Nitrogen-It is necessary for the growth of plants.
- Carbon dioxide-Plants use it to make food by the process of photosynthesis.It controls the Earth's temperature.
- Ozone layer shields the life on earth.

STRUCTURE OF ATMOSPHERE

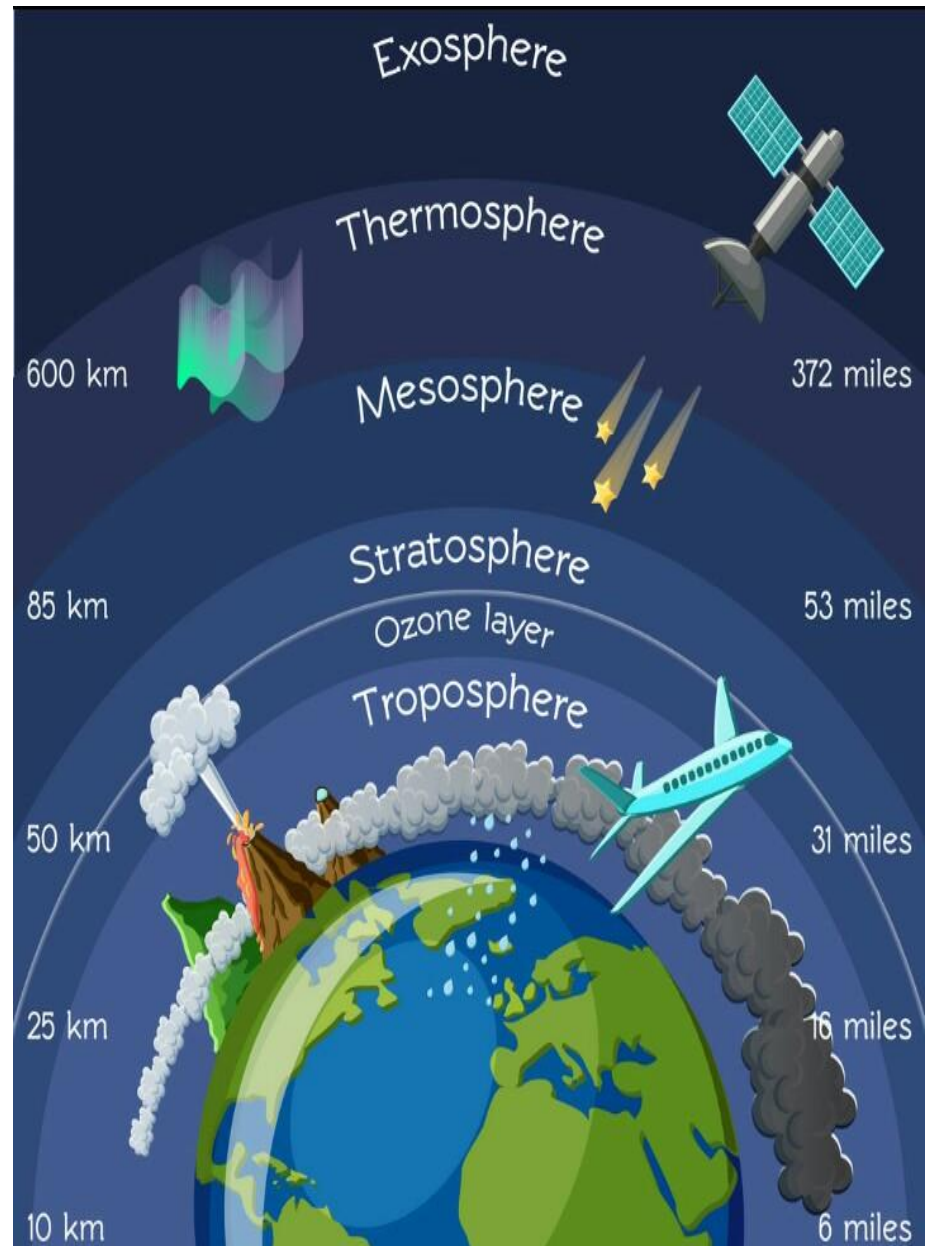
- There are five layers of atmosphere.



LAYERS OF ATMOSPHERE

1.Troposphere

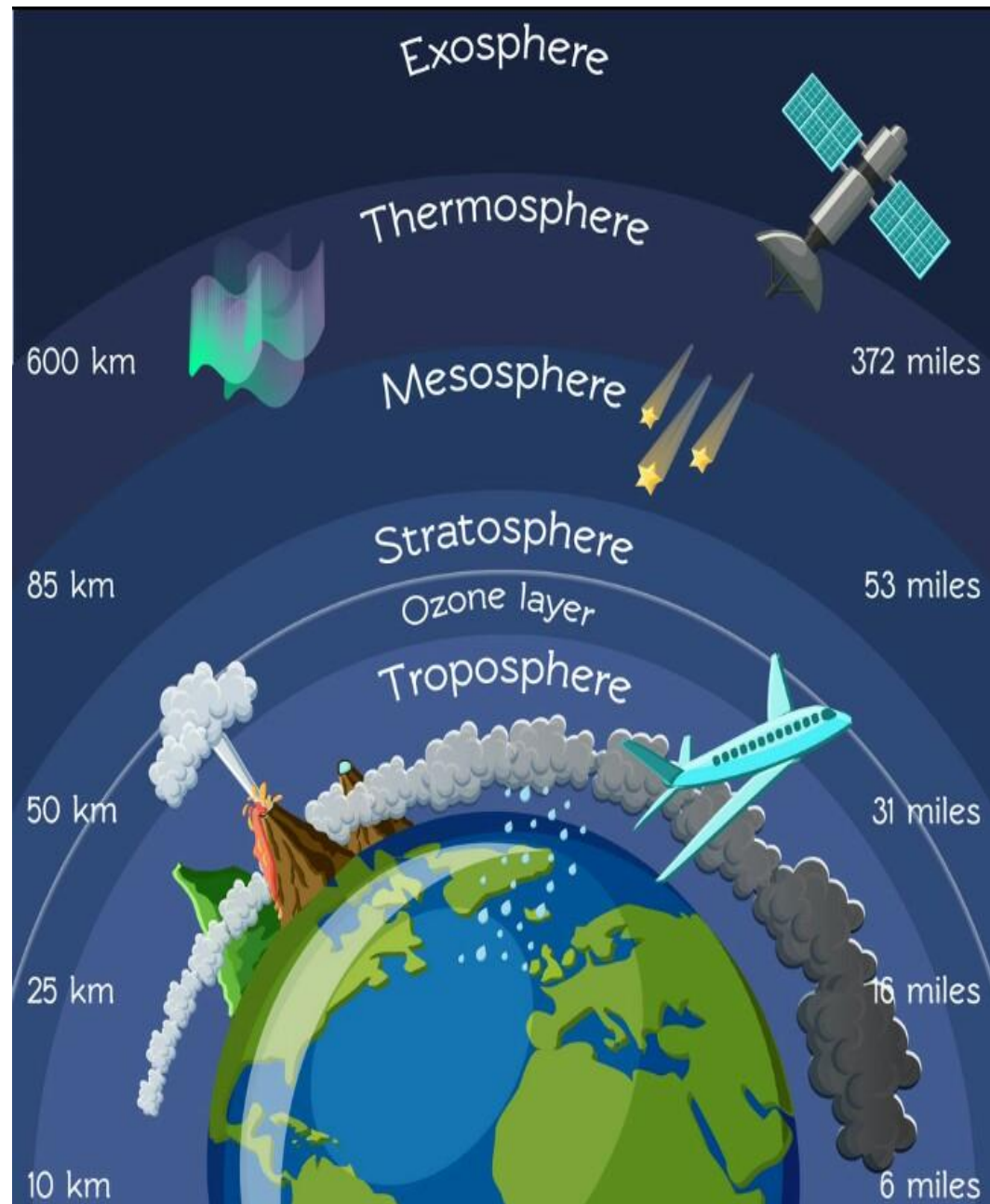
- It extends upto the height of 16 km.
- All weather and climate changes takes place in this layers.



LAYERS OF ATMOSPHERE

2.Stratosphere

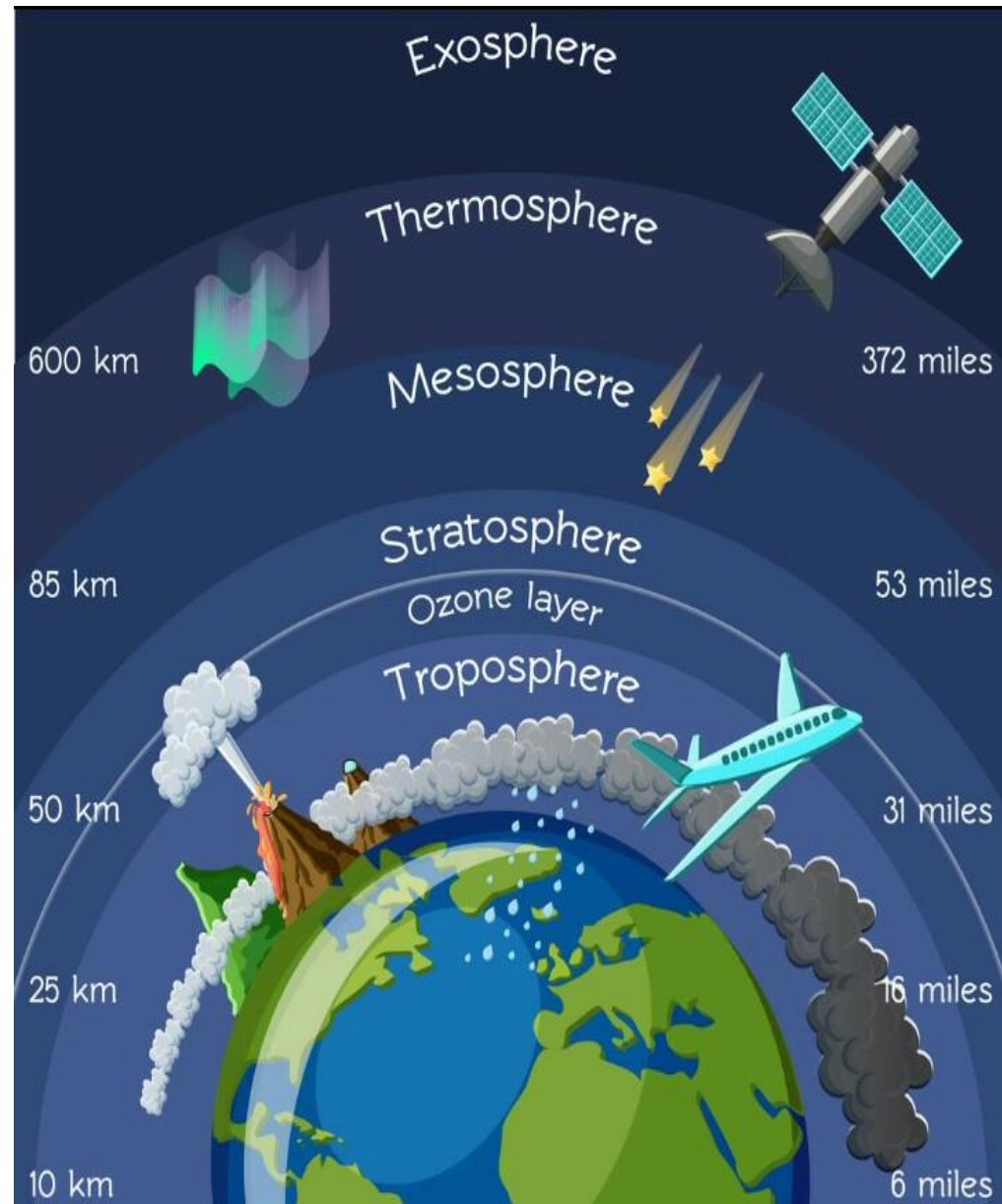
- It is the second layer of atmosphere.
- Extends upto the height of 50km.
- It is free from clouds and weather phenomenon.
- It is ideal for flying aeroplanes.
- Ozone layer present in this layer.



LAYERS OF ATMOSPHERE

3.Mesosphere

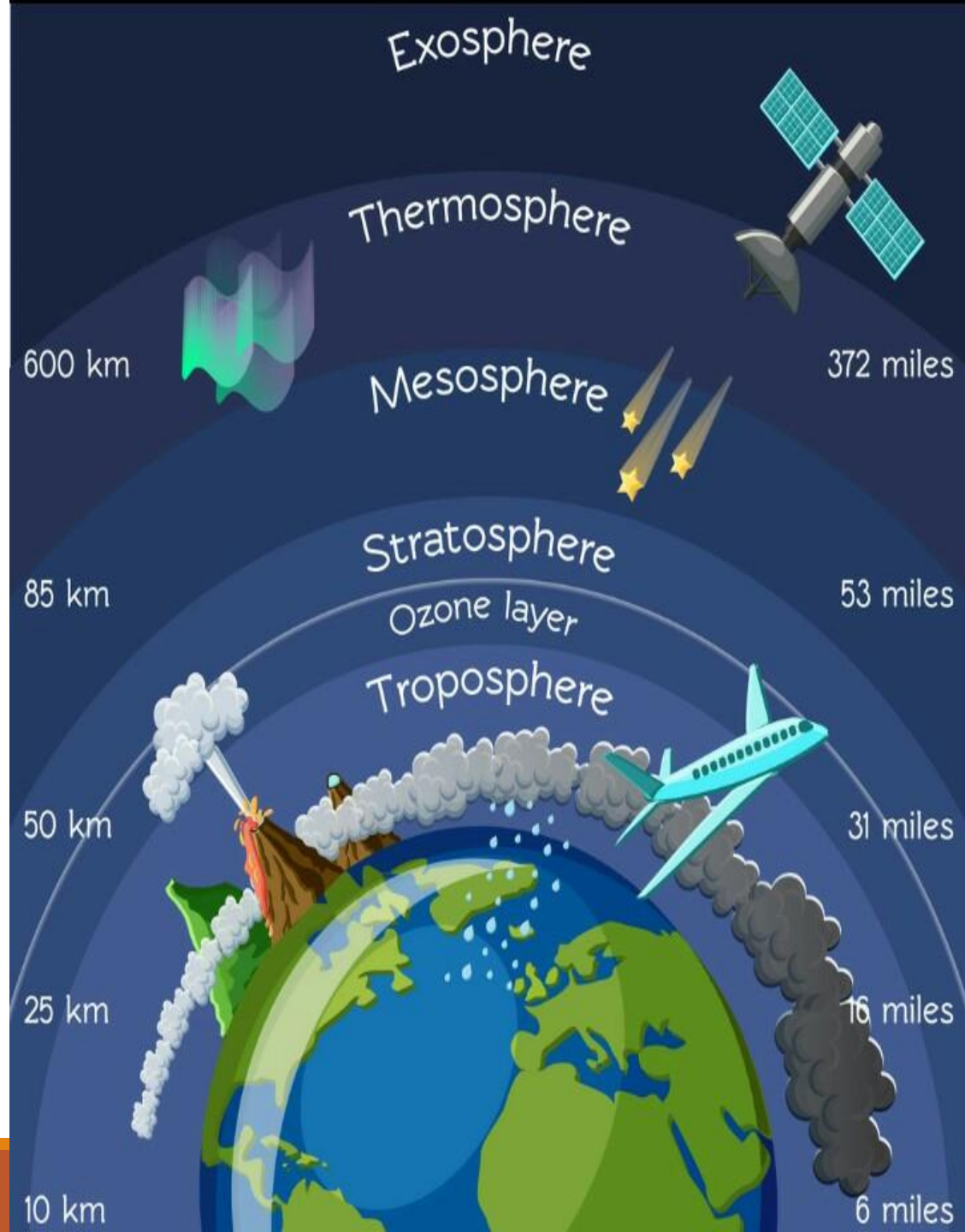
- It is the third layer of atmosphere.
- Extends upto the height of 80km.
- Meteorites burn out in this layer.



LAYERS OF ATMOSPHERE

4.Thermosphere

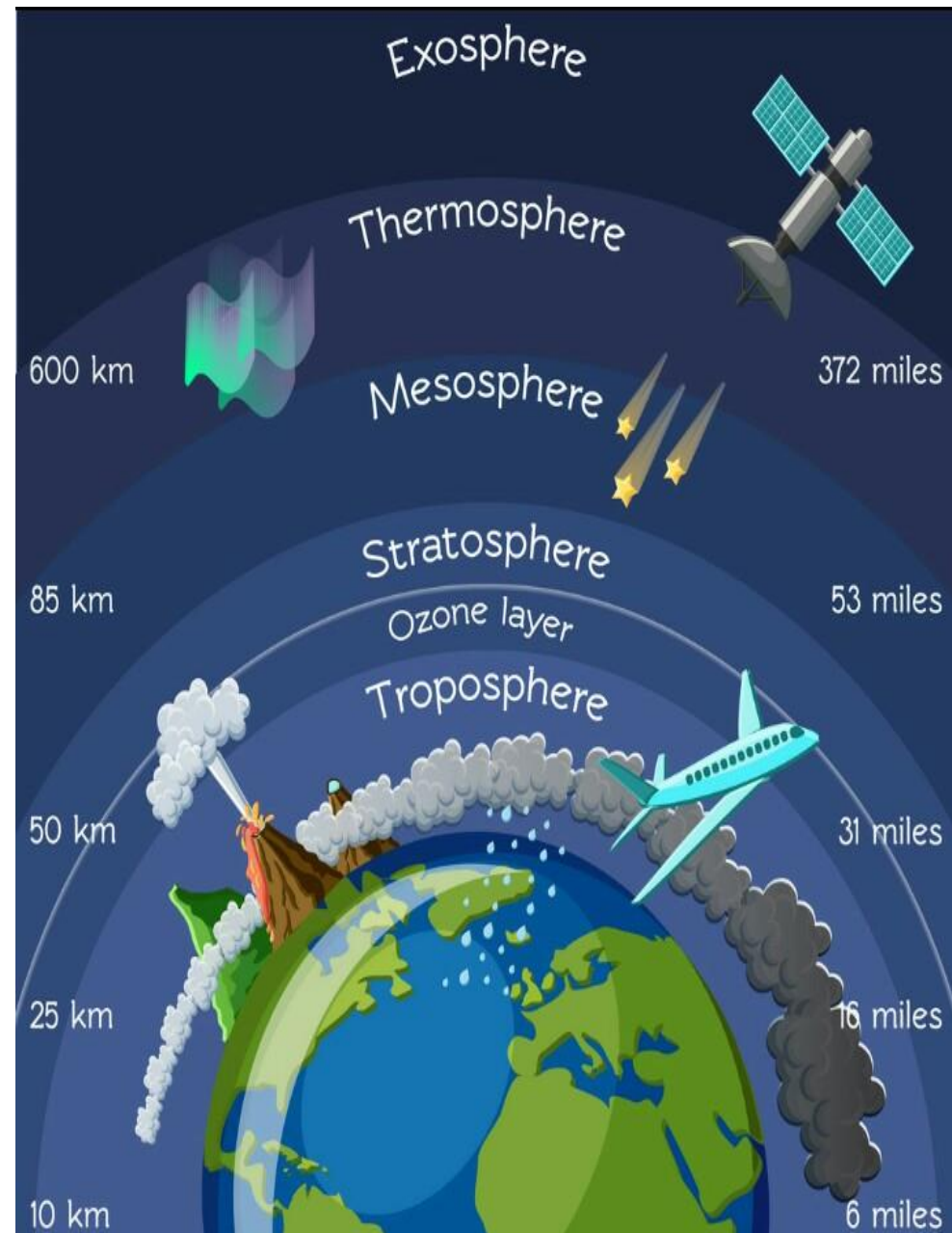
- It is the forth layer of atmosphere.
- It extends upto the height of 400km.
- The lower part of this layer is known as IONOSPHERE.



LAYERS OF ATMOSPHERE

5.Exosphere

- It is the uppermost layer of atmosphere.
- Extends upto the height of 1600km and gradually merges into space.
- Gases like hydrogen and helium are predominant.



Weather & Climate

1. The weather of a place is the condition of the atmosphere at a particular time with regards to heat, sunshine, dryness etc. in that area.

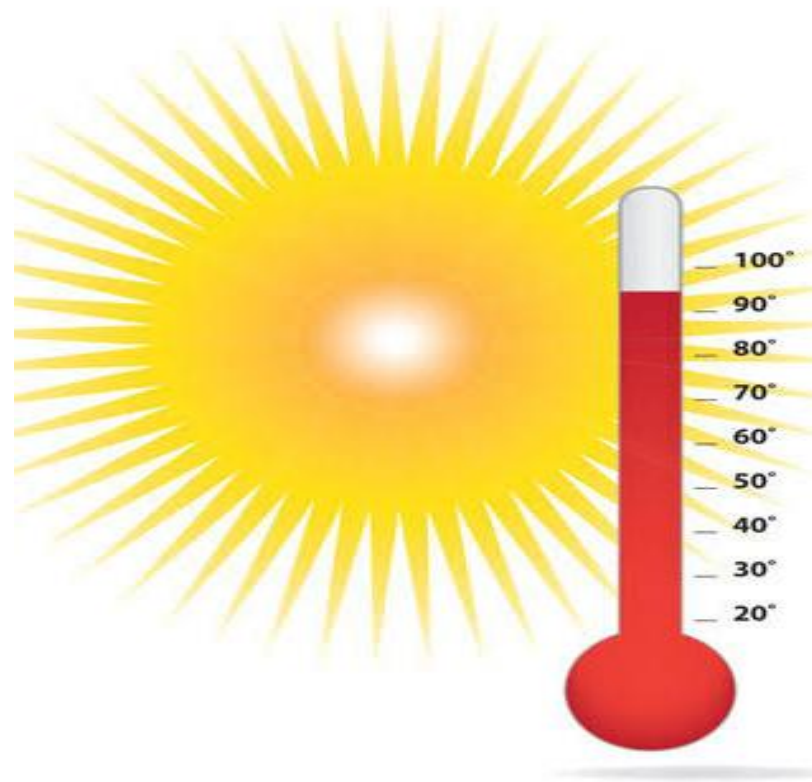


1. The climate is the average weather condition of a place taken over a long period of time.



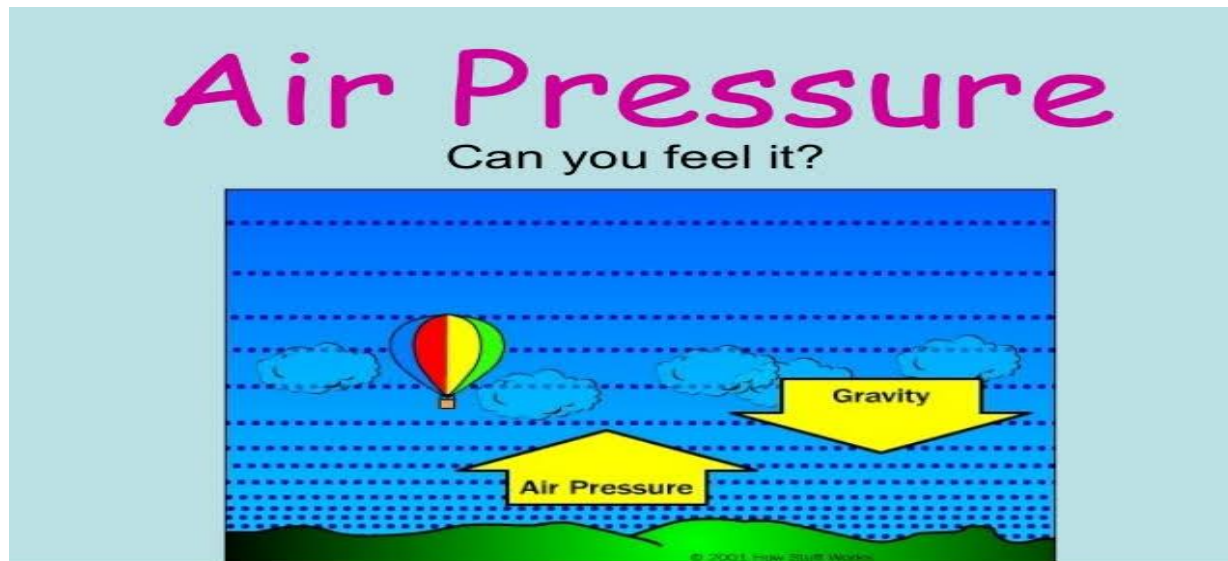
Temperature

1. It is defined as the degree of hotness or coldness of the air.



Air Pressure

Air Pressure is defined as the pressure exerted by the number of gases present in the air on the surface of the earth.



Wind

The movement of air from high pressure area to low pressure area is called winds.



Moisture

It is the tiny drops of water present in the air on the a surface, or in the ground is called moisture.



SUMMARY

- Our Earth is surrounded by a huge blanket of air called atmosphere.
- Air is a mixture of various gases (Nitrogen, Oxygen & Carbon dioxide)and other particles. Nitrogen is the most abundant and make up around 78% of the total atmosphere. Plants need nitrogen for survival. Oxygen makes up around 21% of the total atmosphere.
- The atmosphere is divided into five layers starting from the earth's surface. These are Troposphere, Stratosphere, Mesosphere, Thermosphere and Exosphere. **Troposphere:** This layer is the most important layer of the atmosphere. **Stratosphere:** Above the troposphere lies the stratosphere. **Mesosphere:** This is the third layer of the atmosphere. It lies above the stratosphere. **Thermosphere:** In thermosphere, temperature rises very rapidly with increasing height. Ionosphere is a part of this layer. **Exosphere:** The uppermost layer of the atmosphere is known as exosphere.

SUMMARY

- The weather of a place is the condition of the atmosphere at a particular time with regards to heat, sunshine, dryness etc. in that area. The climate is the average weather condition of a place taken over a long period of time.
- **Temperature:** The degree of hotness and coldness of the air is known as temperature **Air pressure** is defined as the pressure exerted by the weight of air on the earth's surface. **Wind:** The movement of air from high-pressure areas to low-pressure areas is called wind. **Moisture:** It is the tiny drops of water present in the air on the a surface, or in the ground is called moisture.