
Air

ACTIVITY:

- FAN A FRIEND WITH THE BOOK
- WHAT DID YOU FEEL?

ANSWER: WIND

- HOW IS WIND RELATED TO AIR?

ANSWER: WHEN AIR MOVES, WIND IS PRODUCED.

During respiration, what gases do we take in and give out?

We take in oxygen and give out carbon dioxide.

✓ Properties of air

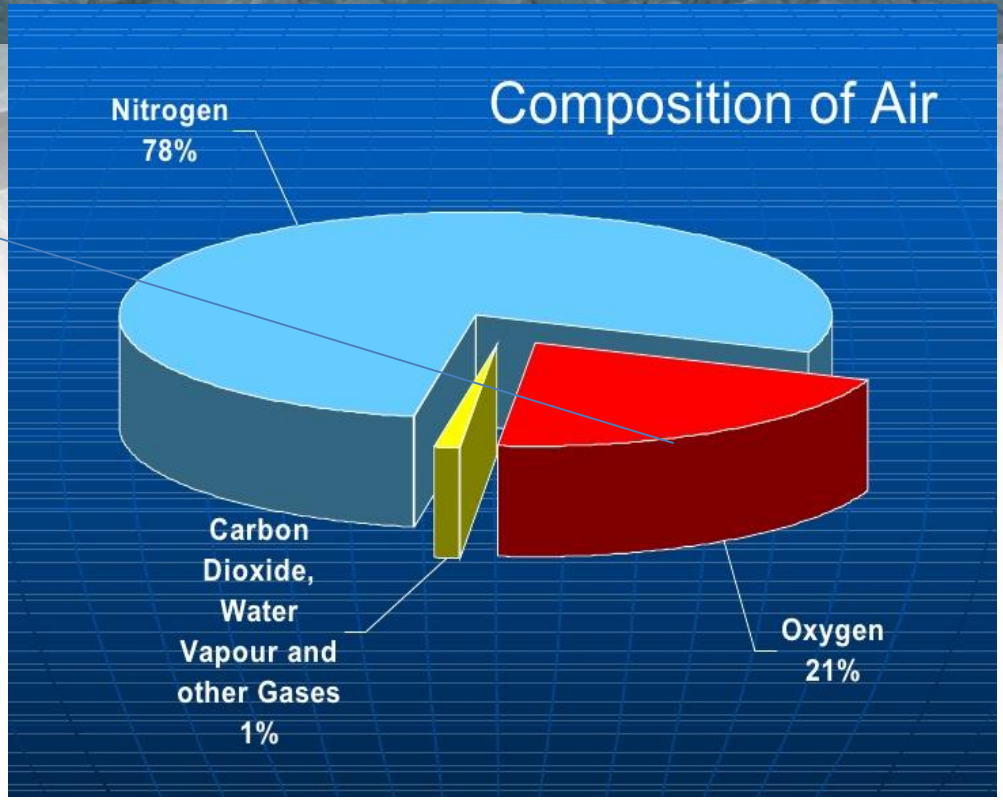
- Air has mass and occupies space.
- Air does not have a fixed shape and volumen.
- Air can flow. (Moving air is called wind.)

❖ AIR CAN EXPAND AND CONTRACT

When air is heated, it expands ans occupies more space. When air cools, it contracts and occupies less space.

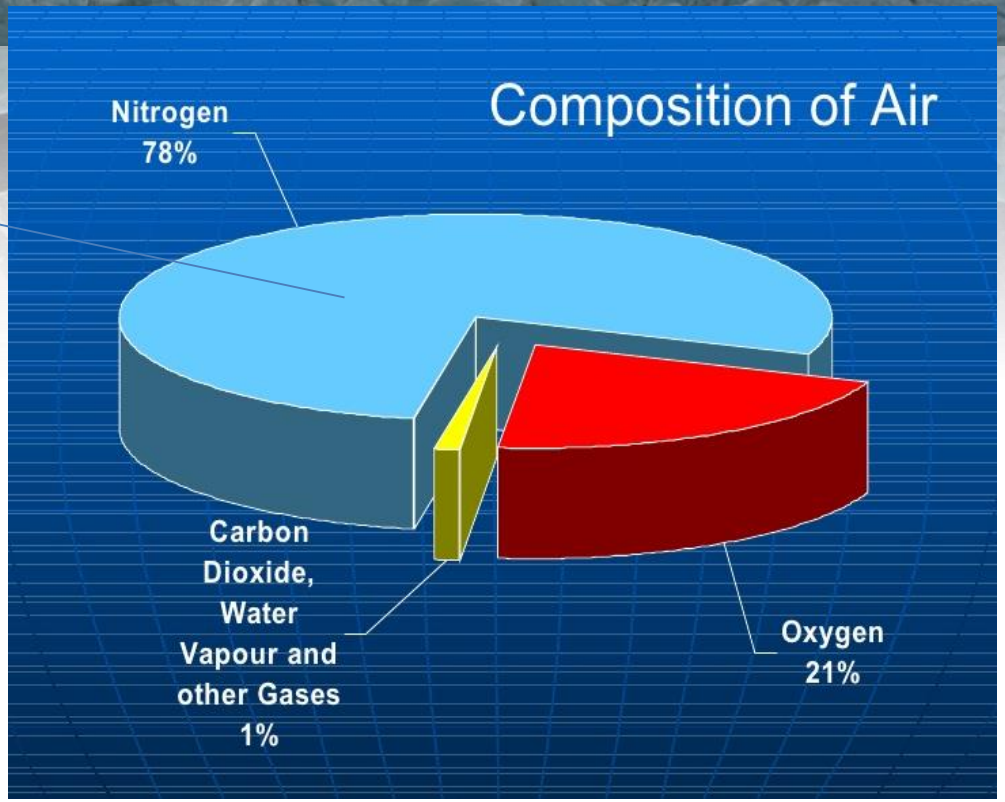
✓ COMPOSITION OF AIR

- Oxygen: Most living things need oxygen to survive. Living things take in oxygen during respiration.
- Oxygen is needed for burning. When we light a candle, burn a piece of a paper or set fire to wood, oxygen is used up.



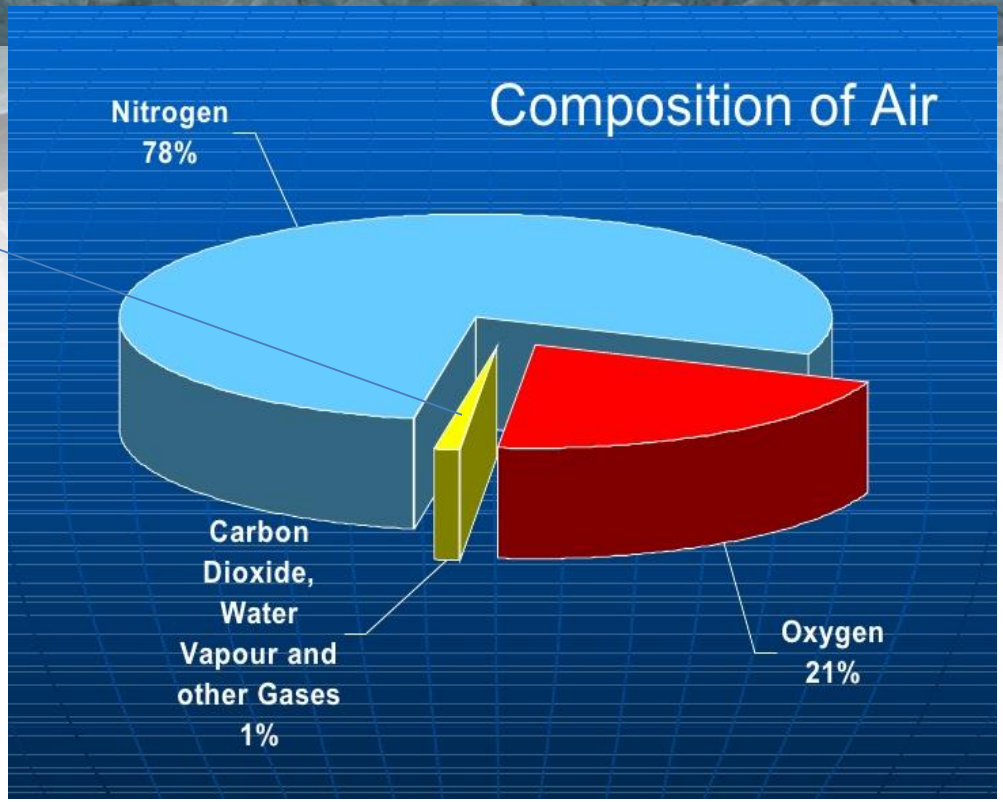
✓ COMPOSITION OF AIR

- Nitrogen: it makes up about four-fifths of air. Most living thing cannot use nitrogen directly from air.
- Only some bacteria in the soil are able to use nitrogen from air. These bacteria change nitrogen into a nutrient can be used by plants



✓ COMPOSITION OF AIR

- Carbon dioxide, water vapour and other gases. When living things respire or when things burn, carbon dioxide is produced. This is important for plants to make its food.
- The air around us has water vapour and there are other gases in the air in small amounts.

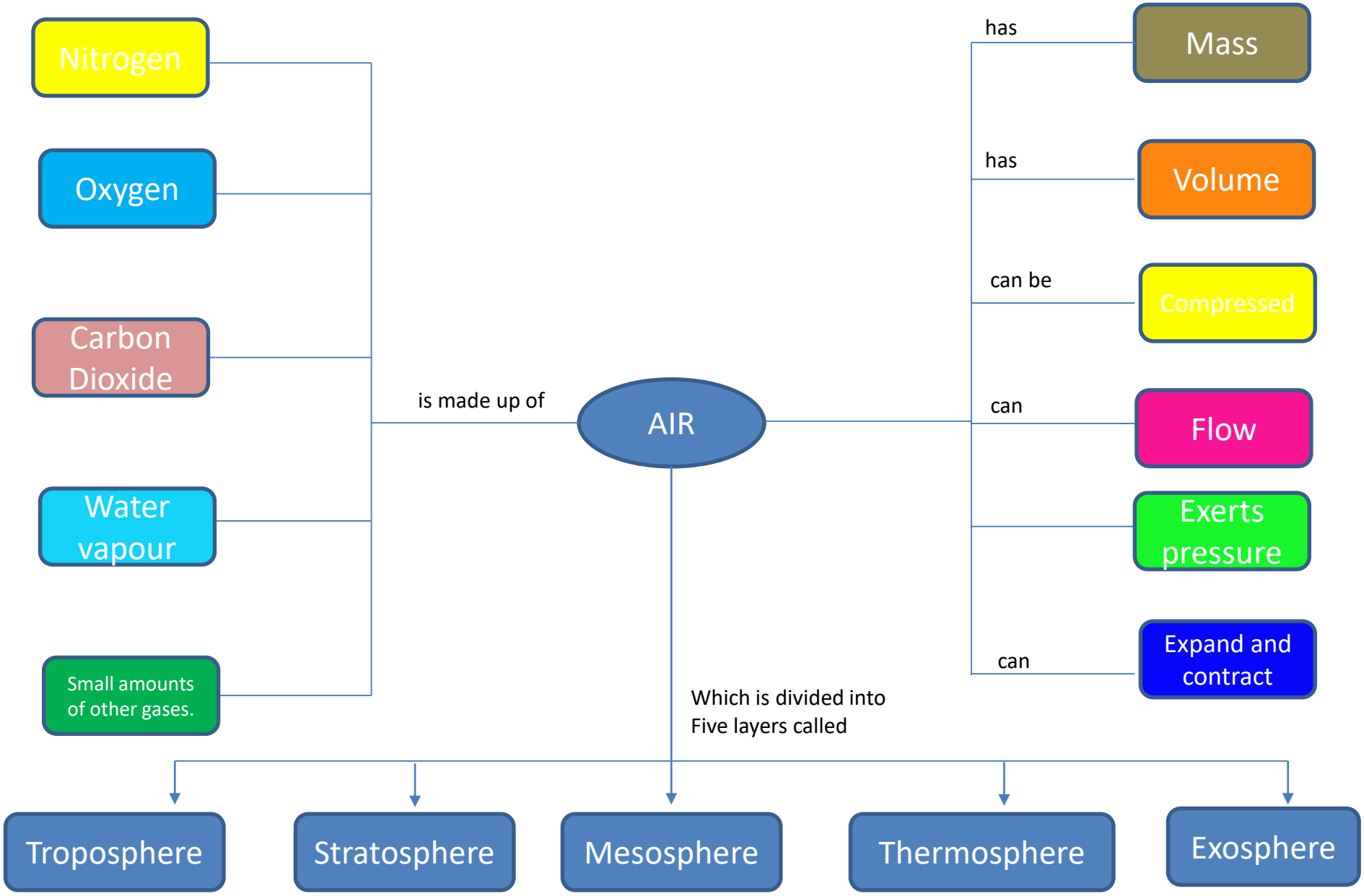


✓ THE ATMOSPHERE

- The earth is surrounded by a layer of air called: the Atmosphere, it extends to a height of about 1000 km above the surface of the Earth.
- It makes life possible on the earth, it protects the earth from harmful radiations coming from the Sun.
- It traps some of the heat from the Sun and helps to keep the Earth warm. without the atmosphere, the earth would be so cold that life would be impossible.

THE ATMOSPHERE IS DIVIDED INTO 5 LAYERS

	Properties		Events
Exosphere	1000 km	This is the layer farthest away from the Earth´s surface. There is almost no air.	 Satellites orbit the Earth in this layer.
Thermosphere	690 km	It extends from 80 to 690km. The air is thinner than the mesosphere.	 Space shuttles and the International space station are present.
Mesosphere	80 km	It extends from 50 to 80km. As we go higher in this layer, the temperature decreases, the air is very thin.	 Meteors burn up in this layer, when they enter the atmosphere.
Stratosphere	50 km	It extends from 18 to 50km. As we go higher in this layer, the temperature increases. This is a layer of ozone.	 Most aircrafts fly in the stratosphere.
Troposphere	18 km	It extends up to 18km above the Earths' surface. As we go higher in this layer, the temperature decreases.	 Events related to weather: lightning and formation of clouds. Birds fly in this layer.


Nitrogen
Oxygen
Carbon Dioxide
Water vapour
Small amounts of other gases.
is made up of
AIR
has
Mass
has
Volume
can be
Compressed
can
Flow
Exerts pressure
can
Expand and contract
Which is divided into Five layers called
Troposphere
Stratosphere
Mesosphere
Thermosphere
Exosphere