

## Chapter 10

### Air

1. Fill in the blanks

- Air also contains \_\_\_\_\_ and small amount (1%) of other gases.
- The other gases include carbon dioxide, ozone, \_\_\_\_\_ and \_\_\_\_\_ etc.
- All the animals, including human beings, need \_\_\_\_\_ to live.
- All the animals use oxygen to produce \_\_\_\_\_ from the food eaten by them.
- \_\_\_\_\_ is required for burning.
- Plants require air to live and \_\_\_\_\_.
- \_\_\_\_\_ prevents harmful ultraviolet rays from reaching the surface of the earth.
- The impurities in air are known as \_\_\_\_\_.
- The \_\_\_\_\_ damages crops and reduce fertility of soil.
- Presence of carbon dioxide and some other gases in air causes the phenomenon called \_\_\_\_\_.

2. Match the following

Column A	Column B
Nitrogen	Clean fuel
Oxygen	Pollutants
Carbon monoxide	Damages the crop
LPG	78% in air
Acid rain	21% in air

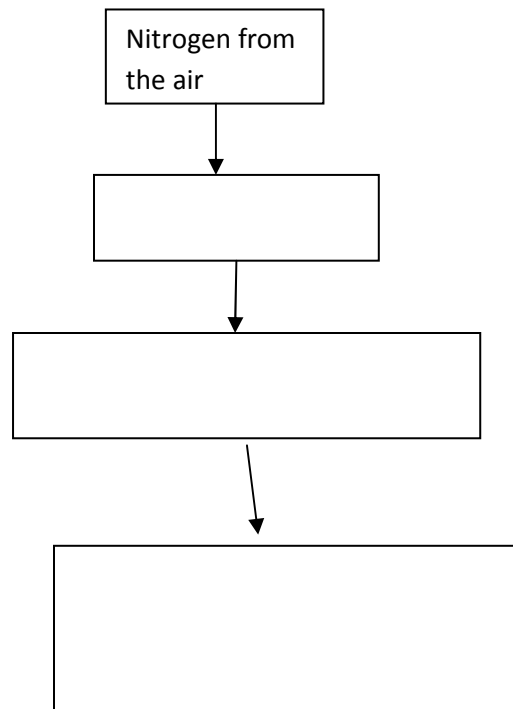
3. State whether given statements are true/false

- Air is an invisible mixture of gases.
- Dirt raised from the ground during dust storm helps to clean air.
- In air the 'increased green house effect' can cause global warming.
- Garbage should be dumped in a pit, where it gets converted into compost.
- Smoke from forest fire does not pollute air.

4. Multiple choice questions

- \_\_\_\_\_ is one of the constituent of other gases in air.  
a) Nitrogen    b) Oxygen    c) Helium    d) Water vapor
- The gas breathed out by animals is \_\_\_\_\_.  
a) Oxygen    b) Carbon dioxide    c) nitrogen    d) hydrogen
- The \_\_\_\_\_ present in the upper layer of the atmosphere prevents ultraviolet from reaching the earth.  
a) Ozone    b) Hydrogen    c) Nitrogen    d) none of the above
- Which one of them is not effect of air pollution?  
a) Polluted air causes problems like suffocation, cough and headache.  
b) Stone dust raised by crushing of stone in quarries.  
c) Presence of carbon dioxide and other gases causes green house effect.  
d) Oxides of Nitrogen and Sulphur cause acid rain.

5. Answer the following questions
- Name the gas which is the major component of air.
  - Are plants able to take nitrogen in its gaseous form from the air?
  - Why is that we can feel air but we cannot see it?
  - How is air important for animals and plants?
  - Why do we say that plants need air to live?
  - How is balance between oxygen and carbon dioxide maintained in nature?
  - How does our atmosphere acts as shield to protect us from harmful rays of sunlight?
  - What is polluted air?
  - Why should we share or pool the vehicles for going to the office?
  - What damages the monuments made of marble?
6. Complete the flow chart on how nitrogen in the air gets absorbed by plants.



- Make a collage showing the effects of air pollution.
- The student should make a poster to encourage tree plantation and along with that write a paragraph how this will help in reducing air pollution.
- The student should carry on research on internet and write down a small write up on what has happened to the ozone hole due to lockdown all over the world.

## Chapter 11

### Our Solar System

1. Fill in the blanks

- a) The sun and its eight planets constitute the\_\_\_\_\_.
- b) The \_\_\_\_ is the central part of the solar system.
- c) \_\_\_\_\_ that work through solar energy are used in devices like calculators and wrist watches.
- d) \_\_\_\_\_ are celestial bodies that move around the sun.
- e) The movement of earth around the sun is known as\_\_\_\_\_.
- f) \_\_\_\_\_ is the smallest and airless planet.
- g) \_\_\_\_\_ is hottest of all the planets.
- h) \_\_\_\_\_ is known as the red planet.
- i) \_\_\_\_\_ is third largest planet of the solar system.
- j) \_\_\_\_\_ is natural satellite.

2. Match the following

Column A	Column B
Revolution	Hottest planet
Rotation	Red planet
Artificial satellite	Movement of planet around sun
Mars	Spinning of earth on its axis
Venus	Aryabhata

3. State whether given statements are true / false

- a) The sun has its own light and heat.
- b) Earth has its own three moons.
- c) Moon takes 28 days to revolve around the earth.
- d) The Saturn is known as ringed planet
- e) Neptune is the hottest planet of all.

4. Multiple choice questions

- A. Which planet is known as blue planet?
  - a) Mercury
  - b) Earth
  - c) Uranus
  - d) Saturn
- B. The earth rotates on its axis in \_\_\_\_\_.
  - a) 12 hours
  - b) 24 hours
  - c) 26 hours
  - d) 32 hours
- C. Earth is known as blue planet because
  - a) Of reflection of sunlight from water and landmass.
  - b) Rotation
  - c) Revolution
  - d) none of the above
- D. Which of them together are known as gaseous planet?
  - a) Jupiter, Mars, Mercury
  - b) Jupiter, Saturn, Uranus and Neptune
  - c) Saturn, Mars, Earth
  - d) Uranus, Neptune and Mars
- E. Which of the statement is not correct about artificial satellite?
  - a) It takes 28 days to complete its revolution around the earth.

- b) It is used for communication.
  - c) It is used for weather forecasting.
  - d) it is used to collect information about other planets.
5. Answer the following questions
- a) Name the constituents of the solar system.
  - b) Why can we think of sun as ball of fire?
  - c) Why is sun essential for growth and survival of all life forms on the earth?
  - d) What is planet?
  - e) What make the planet Venus the hottest planet of all?
  - f) Why does earth appear as blue and green spherical balls?
  - g) What causes the formation of day and night on earth?
  - h) What has made earth suitable for development and sustenance of life?
  - i) Which planets are referred to Jovian planets?
  - j) How is natural satellite different from artificial satellite?
  - k) Why do we see different phases of moon?
6. Define the terms
- a) Revolution
  - b) Rotation
  - c) Orbit
7. Make a model of the solar system showing the relative position of various planets.
8. The student should carefully observe the moon in the night for 30 days and draw the different phases of the moon.
9. Identify me
- a) I am large sphere of hot gases and I am luminous body and I am centre of solar system.
  - b) I am second largest planet and have rings surrounding it.
  - c) I am eighth planet from the sun and I am also known as windy planet.
10. Make a diagram of changes of seasons on the earth.