

## LIVING SCIENCE CLASS6 SOLUTION CHAPTER 16. AIR AROUND Us

P 180. Oral Questions For Formative Assessment

1. thinner
2. a mixture. It is a mixture of mainly nitrogen, oxygen, argon, carbon dioxide and small amounts of other gases. Again varying quantities of dust, smoke and water vapour are also present in air.
3. No, it varies in the air from place to place and from time to time.

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1. false, as for example, fishes breathe through gills.
2. Yes, plants use oxygen for respiration during the day also. But the oxygen released during photosynthesis is more than the oxygen used up in respiration.
3. The solubility of air in water reduces as the temperature increases.
4. Yes, by the rotation of windmills
5. Yes, the atmosphere absorbs some part of the sun's heat and reflects the rest. Again in the night, the trapped heat prevents the earth from cooling down too much.

P. 183 For Formative and Summative Assessment

A. 1. d      2.a      3. d      4. b      5. c      6. b      7. c      8. b

B. 1. Atmosphere      2. nitrogen      3. Nitrogen      4. respiration      5. False

6. oxygen, carbon dioxide      7. gills      8. carbon dioxide      9. oxygen      10. true      11. oxygen

- C. 1. Atmosphere is the blanket of air surrounding the earth.
2. Carbon dioxide is considered to be so important because plants use carbon dioxide for preparing food which in turn gives food to the entire living world.
  3. The amount of water vapour in the air is known as humidity.
  4. Breathing is necessary process in order to keep animals and humans alive. It allows animals and humans to take in oxygen. Whereas energy required for the survival of organisms is produced through the process of respiration.
  5. Fish breathe through their gills.
  6. Yes, plants require nitrogen for their growth.
  7. The ozone layer prevents harmful rays of the sun from reaching the earth. These rays, called ultraviolet rays, can cause eye problems and skin cancer.

- D. 1. Air mainly contains nitrogen (78%) and oxygen (21%). The remaining 1% is made up of argon (about 0.9%), carbon dioxide (0.03%) and small amounts of other gases. Varying quantities of dust, smoke and water vapour are also present in the air.
2. Dust and smoke in the air are harmful for our respiratory system. Fine hair and mucus present in our nostrils filter them out and prevent them from getting into our respiratory system. That is why it is unhealthy to breathe through our mouth.
3. Water lily leaves have stomata on the upper surface because lower surface of water lily is submerged and stomata are required for gas exchange in plants So in water lilies the stomata are located on the upper surface of leaves where it comes in contact with
4. The natural cycle of consumption of oxygen by respiration and burning and its release by photosynthesis is called the oxygen cycle.
5. Air is useful to us in many ways:
- (i) It helps in breathing.
  - (ii) Wind helps to rotate the wind mills and generate electricity.
  - (iii) It helps in the dispersal of seeds.
  - (iv) It helps the birds, insects and bats to fly.
6. The heat and light of the sun fall on the earth's atmosphere. Some of it is absorbed by the atmosphere, while the rest is reflected back. This prevents the earth from becoming very hot during the day. At night, the trapped heat in the atmosphere prevents the earth from cooling down too much. The atmosphere. Thus, acts like a blanket around the earth and helps to keep the earth's surface at the night temperature for life to exist.

#### HOTS Questions

1. Condensation of water droplets on the outside of a tumbler containing ice-cold water.
2. a. It is good to sleep under a tree during the day as the tree gives out oxygen.  
b. It is not good to sleep under a tree since the tree gives out carbon dioxide at night.
3. Exposure to ultraviolet rays due to the depletion of ozone layer in the region
4. Because the force of gravity becomes less as we go higher up. So this is unable to hold air.
5. When the water got warm the solubility of air reduced. The air (including oxygen) dissolved in the water escaped. So all the fish died as they did not get oxygen in the water.