

Chemistry Worksheet Class 7 on Chapter 17 Forests: Our Lifeline with Answers - Set 3

Q1. A dynamic living entity is-

- a.) Forests
- b.) Oceans
- c.) Animals
- d.) None of the above

Correct Answer– (a.) Forests

Q2. Forests help in-

- a.) controlling floods
- b.) conservation of soil
- c.) controlling soil erosion
- d.) All of the above

Correct Answer– (d.) All of the above

Q3. How much area is covered by forests?

- a.) one-third
- b.) one-fourth
- c.) half
- d.) All of the above

Correct Answer– (a.) one-third

Q4. A food chain includes:

- a.) producers and consumers
- b.) producers, herbivores and consumers
- c.) herbivores and carnivores
- d.) None of the above

Correct Answer– (b.) producers, herbivores and consumers

Q5. Which of the following is not a forest product?

- a.) Gum
- b.) sealing wax
- c.) plywood
- d.) kerosene

Correct Answer– (d.) kerosene

Q6. Fill in the blanks.

- a.) The correct arrangement in the order from upper layers to lower layers in forests is trees, _____, _____, and vegetation.
- b.) Plants are _____ in a food chain.
- c.) If forests disappear, _____ gas will increase.

Answer.

- a.) The correct arrangement in the order from upper layers to lower layers in forests is trees, shrubs, herbs, and vegetation.
- b.) Plants are producers in a food chain.
- c.) If forests disappear, carbon dioxide gas will increase.

Q7. State True or False.

- a.) Animals provide nutrients to plants.
- b.) Forests act as the purifier of air and water.
- c.) Micro-organisms acting on dead plants produce mushrooms.

Answer.

- a.) Animals provide nutrients to plants– True.
- b.) Forests act as the purifier of air and water– True.
- c.) Micro-organisms acting on dead plants produce mushrooms– False.

Q8. Define Decomposers.

Answer. Decomposers are microorganisms that break down complex organic compounds found in dead plants and animals, as well as their products, such as faeces and urine, into simpler substances. Bacteria decompose organic matter. Decomposers decompose dead plants and animals, acting as environmental cleaners.

Q9. What is understorey?

Answer. The layer of vegetation in a forest just below the canopy is known as the under-storey. The understorey is located above the shrub layer. Smaller trees and tree saplings make up the understorey layer. The understory layer of a forest receives significantly less sunlight. Smaller trees in the understory grow to become larger trees only when tall trees die and open gaps in the canopy, allowing more sunlight to reach the smaller trees for further growth.

Q10. What is the difference between a food chain and a food web?

Answer. A food chain follows a single path through which animals find food. A food web, on the other hand, represents various paths along which plants and animals are linked. A food web is made up of several food chains.

An organism in a food chain consumes a single item, whereas an organism in a food web consumes multiple items. A food chain has a single path for energy flow, whereas a food web has multiple paths.

Q11. How can you describe scavengers?

Answer. Some animals eat the dead bodies of other animals. Scavengers are animals that consume the remains of the dead body of other animals. Vultures, jackals, hyenas, and crows eat dead animals and clean the environment. Scavengers are also referred to as environmental cleaning agents. Dead bodies of forest animals could not be removed quickly without the help of scavengers, but scavengers are not decomposers.

Q12. Why are plants called producers of a food chain?

Answer. Plants are referred to as producers because they produce their own food through photosynthesis, a process in which they use sunlight, carbon dioxide, water, and chlorophyll to produce nutrients and release oxygen as a byproduct.

Q13. Why are forests referred to as "green lungs"?

Answer. Plants produce oxygen through the process of photosynthesis. Plants help in providing oxygen for the respiration of animals and human beings. They also keep the atmosphere's oxygen and carbon dioxide levels balanced. That is why forests are referred to as "green lungs."

Q14. Explain different types of consumers.

Answer. Different types of consumers are as follows:

- Primary consumers (herbivores) eat plants or their products directly as food.
Examples- deer and rabbits.
- Secondary consumers (Carnivores) capture and consume their prey.
Examples- Tiger, wolf, lion, etc.
- Tertiary consumers (Large carnivores) capture and eat smaller carnivores.
Example- Snake and owl.
- Quaternary consumers (Apex carnivores) - They hunt and feed on larger carnivores.
Example- Hawks and raccoons.
- Decomposers (Microconsumers) eat dead and decaying plant and animal matter.
Example- Kite, crow, vultures, hyenas, etc.

Q15. Name the following.

- a.) The branched part of a tree above the stem.
- b.) The different horizontal layers created by different types and sizes of trees.
- c.) The term used for cutting down trees on a large scale.
- d.) The practice of planting trees to save the environment from the bad effects of deforestation.
- e.) A term used to celebrate the planting of saplings on a large scale.

Answer.

- a.) The branched part of a tree above the stem.-- Crown.
- b.) The different horizontal layers created by different types and sizes of trees-- Forest floor.
- c.) The term used for cutting down trees on a large scale-- Deforestation.
- d.) The practice of planting trees to save the environment from the bad effects of deforestation-- Afforestation.
- e.) A term used to celebrate the planting of saplings on a large scale-- Van Mahotsava.

Q16. Differentiate between producers and consumers.

Answer. The main differences between producers and consumers are given in the below table:

Producers	Consumers
Producers are organisms that can make their own food.	Consumers are organisms that obtain energy by feeding on other organisms.
Producers are commonly called autotrophs.	In the food chain, heterotrophs are primary, secondary and tertiary consumers.
An Example of Producers is green plants.	An Example of consumers is animals, like human beings, dogs, lions, tigers, etc.

Q17. Explain the food chain.

Answer. A food chain is the sequence of events in an ecosystem in which one living organism consumes another, and that organism is then consumed by another larger organism. A food chain is formed by the flow of nutrients and energy from one organism to another at different trophic levels. The food chain also explains how living organisms feed or interact with one another. The trophic level refers to the sequential stages of a food chain, beginning with producers at the bottom and progressing to primary, secondary, and tertiary consumers. A trophic level is any level in a food chain.

Q18. Explain how forests can prevent floods.

Answer. Rainwater seeps into the forest ground via the roots of trees and plants, raising the water table. The forest prevents river floods by collecting rainwater and slowly releasing it into rivers. If forests are cut down, the excessive amount of rainwater falling during heavy rains cannot be absorbed into the forest ground because there are no trees and plants. A large amount of rainwater will then suddenly flow into rivers, causing flooding and causing significant loss of life and property in the surrounding areas.

Q19. Write down the destructive effect of the forest.

Answer. The destructive effects of forests are as follows:

- Many wild animals and plants are wiped out as a result of forest destruction.
- Forest destruction has an impact on the water cycle, resulting in less rainfall.
- Forest destruction will result in frequent flooding of rivers, resulting in loss of life and property.
- Forest destruction will result in soil erosion, rendering the soil infertile for crop production.
- Forest destruction will result in a scarcity of wood and other forest products.
- Forest destruction will disrupt the balance of carbon dioxide and oxygen in the atmosphere.
- Forest destruction has the potential to alter the Earth's climate and the lives of living organisms.

Q20. List some useful products we get from forests. Why should forests be conserved?

Answer. Some useful products we get from forests are Vegetables and fruits, wood and timber, Latex, turpentine (rubber raw product), Gum, resin, and spices, herbs and medicines.

We should protect forests because they are critical to our survival in the following ways:

- Forests produce oxygen and cause rainfall.
- Soil erosion is prevented by forests.
- Plants rely on animals and birds for pollination and seed dispersal.
- The forest provides us with a variety of medicines.
- In industries, various forest products are used as raw materials.