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**Subject: General Science**

**Book: Oxford Secondary, Science 1**

**FIRST TERM**

**Unit 3: Living things and the environment**

**Pg: 30-39**

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 **WEEK 1**

**Pakistan School, Kingdom of Bahrain**

**E- Support and Learning Material / Session 2020-2021**

**Subject: General Science Grade: 6**

**Book: Oxford Secondary, Science 1 FIRST TERM**

 **Unit 3: Living things and the environment (pg: 30-39)**

**Topic: The biotic and abiotic environment (30-31)**

**Topic: Habitat (31-32)**



**Part 1: Short Question and Answers.**

**1. Define the term environment.**

**Ans:** Everything around a living thing, large or small, that affects its way of life is called its environment.

**2. What is the biotic environment? Give examples.**

**Ans:** The biotic environment is the living things and their activities which affect the environment in which they live.

**3. What are Protists?**

**Ans**: Microscopically small, single-celled living things that are smaller than bacteria.

**4. What is meant by the term abiotic or physical environment? Give examples.**

**Ans:** It is the inorganic, non-living part of an environment that effect the living things of an ecosystem.

**5. How might animals depend upon plants, including trees, even if they do not eat those plants? Explain your answer.**

**Ans:** Animals that do not eat plants might still depend upon trees and other plants for shelter, protection, nest sites and, of course, the oxygen they breathe



African elephants (Loxodonta africana) live in the area surrounding Mount Kilimanjaro, Tanzania.

**Part 2: Detailed Question and Answer.**

**1. What is the difference between a Community, a Habitat and an Ecosystem?**

|  |  |  |
| --- | --- | --- |
| **Community:** It includes biotic factors only when a group of people, plants and animals living in one place, they make up a community | **Habitat:** It Is said to be the natural home of any living organisms. Habitat is made up of five basic requirements for survival; Sufficient space, Air, Water, Shelter and Food.  | **Ecosystem:** It includes all the components of biotic and abiotic factors. It describes the relationships between living organisms and their non-living environment.  |

**Part 3: Multiple choice questions.**

**1. All plants and animals living in one place, such as park, make up a:**

a. habitat b. ecosystem c. collection d. community

**2. Everything around a living thing that effects its way of life is called:**

a. environment b. home c. habitat d. community

**3. Different type of species of plants found in the world are around:**

a. 765 b. 20 c. 400,000 d. less than 1000

**4.** **Tadpole is an aquatic animal, its habitat on land is:**

a. dry land b. moist c. tropical d. volcanic

**5. The habitat of giant pandas are the mountains found in:**

a. Central China b. East Africa c. India d. Nepal

**Don’t forget to learn the question/ Answers**

**Answers:**

**1**. d. community

**2.** a. environment **3**. c. 400,000

**4**.b. moist **5.** a. Central China

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 **Unit 3: Living things and the environment (pg: 30-39)**

**Topic: The physical environment (pg: 33-35)**

**Part 1: Short Question and Answers.**

**1. What kind of things make up the physical environment of a living organism?**

**Ans:** The things which make up the abiotic or physical environment of an organism include climatic factors, such as, sunlight, rainfall, temperature, humidity and factors such as oxygen content of water, humus content, moisture level, acidity or alkalinity of the soil and the degree of pollution.

**2. How soil plays an important role in the physical environment of a place?**

**Ans:** The growth of plants and animals living in a specific place is affected by the type of soil, as the soil is the primary source of water and nutrients for plants, animals then obtain their nutrients form plants. Some soil contains more dead and decaying matter of animals and plant called humus that increases the amount minerals and natural chemicals in the soil.

**3. Explain, why a tropical lizard is more active during the day time?**

**Ans:** Lizards being an invertebrate need the heat of sun to warm their bodies to become active. During the day time lizards may have body temperature of 30°C and move around at great speed to catch its prey. After the sunset, the temperature falls and the lizards become less and less active.

**4. How is water an important content for life in desert and tropical rain forest environments?**

**Ans:** Land plants and animals are distributed according to how much water they need. More than half of all the world’s plants and animals live in the tropical rainforest as it is warm and et and so provides ideal conditions for survival. Whereas, plants and animals living in the deserts and other dry places store water or reduce water consumption for survival.

**Part 2: Detailed Question and Answer.**

**1. Do human beings have the greatest effect on the physical environment or the biotic environment of organisms? Explain your answer.**

**Ans:** It is probable that humans have the biggest effect on the biotic environment,

because of hunting, the destruction of habitats, the effects of pollution, and the

 use of chemical pesticides to control weeds, pests, and diseases. Even when human activities affect the abiotic environment, this still has an impact on the plants, animals, and other organisms living in an ecosystem.

**2. What do you know about the desert environment? **

**Ans:** Life in the desert environment experience less rainfall, high temperatures during the day time and very cold nights, short-lived annual plants with water storage and drought-resistant seeds forming ability, less species of animals that are active during the night time and rest under shade during the day. But cold-blooded animals remain active during the day and escape into their shelters during cold nights. Soil is not much fertile due to low amount of humus that results in little plant life.

**3. A camel has long eyelashes, a hump containing fat, and large padded feet. It can go for five days without drinking. It can then drink up to 130 liters of water in ten minutes. A camel also produces little sweat and urine. Escribe how these features help a camel to survive in the desert?** 

**Ans:** The camel’s long eyelashes protect its eyes from wind-blown dust and sand. Its hump contains fat which can be used during respiration to produce energy and water. The camel’s padded feet spread its weight so that it does not sink into the sand. Because it produces little sweat or urine, the camel does not lose much water by excretion. The camel’s rapid and large consumption of water, when available, allows it to travel long distances between drinks.

**Part 3: Multiple choice questions.**

**1. Which of the following does NOT form part of the physical environment of a living thing:**

a. climate b. soil c. plant life d. light

**2. Green plants use sunlight energy to produce food by the process of:**

a. Photosynthesis b. exercise c. respiration d. wilting

**3. In order to reach the light for photosynthesis and growth, forest trees grow:**

a. short b. tall c. rolled d. flat

**4. The dead and decaying plant and animal matter in soil, is called:**

a. feces b. clay c. rocks d. humus

**5. Mammals and birds are Not affected by the temperature because they are:**

a. warm-blooded b. cold blooded c. Big in size d. flying

**6. The water in which most freshwater plants and animals live is:**

a. acidic b. neutral c. Alkaline d. Sulphur rich

**7. Organisms such as, reptiles, amphibians, fishes and all of the invertebrates are said to be:**

a. warm-blooded b. carnivore c. cold-blooded d. Primary producer

**8. As compared to cold water, warm water contains less dissolved:**

a. oxygen b. minerals c. sugar d. carbon dioxide

**9. Low rainfall and high temperatures only during the day are recorded in:**

a. Oceans b. wetlands c. deserts d. forests

**10. Large number of plants, trees, shrubs, ferns climbers and other small plants are found in:**

a. Tropical rainforest b. Savana deserts c. wetlands d. oceans

**Answers:**

|  |  |
| --- | --- |
| 1. | c. plant life |
| 2. | a. Photosynthesis |
| 3. | b. tall |
| 4. | d. humus |
| 5. | a. warm-blooded |
| 6. | b. neutral |
| 7. | c. cold-blooded |
| 8. | a. oxygen |
| 9. | c. deserts |
| 10. | a. Tropical rainforests |

**Don’t forget to learn the question/ Answers**



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 **Unit 3: Living things and the environment (pg: 30-39)**

**Topic: Living things depend upon one another (pg: 35)**

**Topic: Other feeding relationships (pg: 36)**

**Part 1: Short Question and Answers.**

**1. Why are plants called producers?**

**Ans:** Plants are the only living organisms capable of making their own food. All the animals depend upon plants directly or indirectly for their food and oxygen. So, they are often called as producers of the world.

**2. What is meant by the term consumers?**

**Ans:** Animals not able to make their own food depend upon plants for food. They directly or indirectly eat the plant material; thus, they are called as consumers.

**3. What are Scavengers?**

**Ans:** Scavengers are animalsthat eat the dead animal by breaking it down into smaller pieces and inorganic waste materials. Vultures are the best-known scavengers.

**4. What is the role of humus?**

**Ans: Humus** adds moisture and nutrients to improve the health of soil. **It** is the dark organic matter that is formed in soil when dead plant and animal matter decays.

**5. Who are the decomposers and what do they do?**

**Ans:** Bacteria and fungi act as decomposers, they work to bring about the decay of dead animals and plants that have be broken down into smaller pieces by scavengers and detritivores after they die.



**Part 2: Multiple choice questions.**

**1. Plants can make their own food, so they are called:**

a. eaters b. producers c. consumers d. scavengers

**2. Animals which eat only plant food are called:**

a. Primary consumer b. secondary consumers c. scavengers d. carnivores

**3. The main decomposers which bring about the decay of dead organism:**

a. green plants b. parasites c. bacteria and fungi d. invertebrates

**4. Bacteria and fungi in an ecosystem:**

a. produce energy b. use nutrients c. use carbon dioxide d. release nutrients from dead

**5. Primary consumers like cattle, goat and sheep are also called as:**

a. herbivore b. decomposers c. scavengers d. parasite

**Answers:**

1. b. producers

2. a. primary consumers

3. c. bacteria and fungi

4. d. release nutrients from dead

5. a. herbivore

**Don’t forget to learn the question/ Answers**



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 **Unit 3: Living things and the environment (pg: 30-39)**

**Topic: Living things depend upon one another (pg: 35) [continued…]**

**Topic: Other feeding relationships (pg: 36) [continued…]**



**Part 1: Detailed Question and Answer.**

**1. In general, why would you expect a carnivore to be, a) camouflaged; b) larger than herbivore?**

**Ans: a)** Most carnivores, including wolves, jaguars, cheetahs, leopards, tigers, and other large members of the cat family are camouflaged, so that they can approach their prey without being seen.

 **b)** Most carnivores are larger than their prey, so they can easily overwhelm it. There are exceptions, however. Wolves and lions hunt in a group and so can capture prey that is larger than each individual predator.

**2. Why are herbivorous animals generally poor fighters, and better at defense than attack?**

**Ans:** Herbivorous animals are generally poor fighters because their bodies are quite large or plump and most of them lack the sharp teeth, claws, or other weapons used by carnivores when hunting. Many herbivores are, however, camouflaged and some, such as deer and antelopes, can run quite fast over short distances.



**Part 2: Multiple choice questions.**

**1. Animals such as foxed, lion, leopards that can only eat the producers indirectly are:**

a. herbs b. secondary consumers c. avian d. fungi

**2. Consumer that eat both animals and plants, like humans, raccoons, badgers are:**

a. herbivore b. detritivore c. Omnivores d. parasite

**3. Animals that feed on dead animals and organic waste material are called:**

a. herbivore b. omnivore

c. bacteria d. Scavengers

**4. The breakdown of dead plant material into smaller pieces is done by:**

a. scavenger b. detritivores

**Don’t forget to learn the question/ Answers**

 c. omnivore d. herbivore

**Answers:**

1. b. secondary consumer 2. c. Omnivores

 3. d. Scavengers

 4. b. detritivores

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 **Unit 4: Living things and the environment pg 30-36**

**Activity 1**



**Activity 2.**

**List any 5 different types of Deserts and Tropical rainforests found in the world.**

|  |  |
| --- | --- |
| **Deserts** | **Tropical Rainforests** |
|  |  |

**Activity 3.**

**Write few words about your favourite animal’s habitat and list 1 or 2 ways by which it is adapted to its habitat.**

**Note:**

**Attempt any one part.**

**It should not exceed 4-5 lines.**

**Exercise:**

**Part A: Write few sentences about the factors / parts of the environment that play role in your daily life.**

**OR**

**Part B: Shown below is a type of habitat, freshwater pond habitat. Write few statements about how animals and plants adapted to live in this habitat.**

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