

New Era Public School [REDACTED]
Solved Assignment of unit - III
class: 6th Subject: Science

Lesson No. 11 Topic: Habitats of
organisms.

Short Answer Questions:

Q1. What do you mean by the environment?

Ans: Everything that is found in the surrounding of a living and all factors affecting its growth, development and survival in these surroundings are known as its environment.

Q2. What are the abiotic components of the environment?

Ans: Temperature, rainfall, humidity and wind speed are the abiotic components of the environment.

Q3. Why are plants called autotrophs?

Ans: Plants make their own food. They are also called autotrophs.

Q4. What are heterotrophs?

Ans: Heterotrophs cannot make their own food and must get it from other organisms.

Q5. What is a habitat?

Ans: A habitat is an area or environment where an organism is normally found.

Q6. Name the two types of aquatic habitats?

Ans: Marine habitats and freshwater habitats are two types of aquatic habitats.

Q7. What are hydrophytes?

Ans: Plants that grow in water are called hydrophytes. These plants either float on water or live under water.

Q8. How are the spots of a Jaguar useful?

Ans: Jaguar have spots on their bodies. It makes hard for their prey to see them among the speckled shadows of the rainforest.

Long Answer Questions

Q1. Distinguish between producers, primary consumers and secondary consumers?

Ans. PRODUCERS: Producers are organisms that can make their own food. They are also called autotrophs since they make their own food.

PRIMARY CONSUMERS: Primary consumers are animals that eat only plants. They are also known as Herbivores. They get their food directly from plants. Cows, horses and giraffes are common example.

SECONDARY CONSUMERS: are animals that only eat other animals. They are also known as Carnivores. They get their food indirectly from plants. Lions, tigers and wolves are common example.

Q2. What are aquatic animals? How is a fish adapted to live in water?

Ans. Animals living in or near water are called aquatic animals. Fish show the following adaptations to live in water.

1) Fish have streamlined bodies that make it easier for them to move in water. They also have special organs called gills to breathe in oxygen from the water.

- ii) Fish have fins and tail to swim. Many of them have air bladders that help them float in water.

Q3. How is a camel adapted to live in its habitat?

Ans: The camel is commonly found in the desert habitat. It has the following adaptations:

i) A camel can drink more than 100 ltrs of water at one time. This water is stored in the body.

ii) The camel can go without water for many days. The hump of a camel has stored fat, which serves as a food store.

iii) The body of a camel can tolerate high temperature.

iv) A camel's feet have leathery soles for walking on soft, shifting sand. camels can also close their nostrils during a dust storm to protect themselves from blowing sand.

Q4. Describe the adaptations seen in animals that live on mountains?

Ans: Animals that live on mountains have the following adaptations.

- i) They either have thick fur like the snow leopard, or thick long hair on their body like the yak and the mountain goat, to protect themselves from the cold.
- ii) Mountain goats and musk deer have strong hooves to walk on rocky slopes.
- iii) They are also adapted to bundle long cold winters and to breed and raise their young quickly in the summer.
- iv) Many animals like bears and dormice hibernate. This means that they go to sleep for the entire winter because food is not abundant.

A) Multiple Choice Questions

- 1) d) 2. a) 3. a) 4. a) 5. a) 6. b)
7. c) 8. b) 9. c) 10. b)

B) Fill in the blanks:

1. biotic, abiotic 2. Producers 3. Plants
4. Carnivores 5. habitat 6. Streamlined
7. aquatic plants 8. wet 9. waxy
10. blubber.

C) True/False

1. F 2. T 3. T) 4. F) 5. F) 6. F)
7. T) 8. F) 9. T) 10. F)

Lesson No: 12Topic: Measurement and MotionShort Answer Questions

Q1. What is a Physical Quantity?
Give three examples of Physical Quantities?

Ans. Any quantity that can be measured is called a physical quantity. Length, weight, volume, time, speed and temperature are some quantities that can be measured.

Q2. What is a standard unit?

Ans. A standard unit is a standard measure that remains the same whenever, wherever and by whomever it is used.

Q3. In the statement, Bangalore is 920m above sea level, what do 920 and m stand for?

Ans. 920 m is the unit of distance which means 920 metres above the height of sea level.

Q4 Name the appropriate unit for measuring the following.

i) The thickness of a cardboard sheet
Ans: The thickness of a cardboard sheet is measuring in mm

ii) The distance between stars
Ans: light year

iii) The length of a pencil
Ans: metre (m), millimetre (mm), centimetre (cm)

iv) The length and breadth of a room
Ans: metre (m)

Q5: What causes Parallax error?

Ans: Parallax error is primarily caused by viewing the object at an oblique angle with respect to the scale, which makes the object appear to be at a different position on the scale.

Q6: State whether the following motions are translatory, rotational or vibratory.

i) A man walking on a straight road.

Ans: Translatory motion

ii) The movement of the hands of a clock.

Ans: Rotational motion

iii) The movement of the needle of a sewing machine

Ans: Vibratory motion

iv) A spinning top.

Ans: Rotational motion

(v) The movement of a coin on a carrom board.

Ans: Rotational motion

(vi) The wheels of a moving truck.

Ans: Rotational motion

Long Answer Questions

Q1. Why is it essential to have a standard system of units?

Ans: The international system of units, universally known as the SI system, is necessary because lack of standard unit of measurement would cause confusion and a waste of time in converting from one unit to another all the time. According to the SI system, length is measured in metres, mass in kilograms, temperature in kelvins and time in seconds.

Q2. What are the common errors that may arise while measuring with a metre scale?

Ans: (a) Measuring the length using a metre scale, there are three possible errors which may occur.

1. If the metre scale is not placed exactly along the length being measured, we will get a wrong reading. It is therefore necessary to position the metre scale correctly.

2. An error can occur due to the wrong position of the eye while taking a reading. This error is called parallax error.
3. The portion of the metre scale near the mark that represents zero may be worn out.

Q3. What is translatory motion? Describe the different kinds of translatory motion.

Ans. If an object moves as a whole so that every part of the object moves through the same distance in a given period of time, the body is in translatory motion. For example a person walking on the road.

There are two kinds of translatory motion.

1. Rectilinear motion: If an object moves in a straight line, its motion is said to be rectilinear. For example a car moving along a straight road is in rectilinear motion.
2. Curvilinear Motion: If an object moves along a curved line, the motion is said to be curvilinear. For example when a car or a ship turns, it moves along a curved path and this is called curvilinear motion.

Q4. What is the difference between circular and oscillatory motion? Illustrate with examples.

Ans: Circular motion

1. When the motion of an object is around a fixed point that is outside the object, it is called circular motion.

2. The motion of a stone tied to a string and the revolution of the earth around the sun are examples of circular motion.

Oscillatory motion

When a body moves to and fro about a fixed point, it is said to be in oscillatory motion.

The oscillations of a pendulum, and the movement of a swing are examples of oscillatory motion.

Q Express the following in metres.

1. The distance from the Earth to the moon is $400,000 \text{ km} = 1 \text{ km} = 1000 \text{ m}$
 $400,000 \times 1000 \text{ m} = 400,000,000 \text{ m}$

2. The height of Mt. Everest is 8.8 km

Ans: We know $1 \text{ km} = 1000 \text{ m}$

$$8.8 \text{ km} = 8.8 \times 1000 \text{ m}$$

$$\frac{88}{10} \times 1000 = 8800 \text{ m}$$

3. The thickness of paper is $0.01 \text{ cm} =$
 $1 \text{ cm} = \frac{1}{100} \text{ m} = 0.01 \times \frac{1}{100} = 0.0001 \text{ m}$

4. The diameter of a pin is $0.5 \text{ mm} =$
 $0.5 \times \frac{1}{1000} = 0.0005 \text{ m}$

A. Choose the correct option

1. d) 2. c) 3. b) 4. d) 5. a) 6. c)
 7. d) 8. d) 9. d) 10. d)

B. Fill in the blanks:

1. Transportation 2. Physical 3. SI

4. Light Year 5. Parallax 6. Stationary

7. rectilinear 8. Linear 9. non-Periodic

10. Periodic.

C. True / False.

1. F) 2. T) 3. T) 4. T)

5. T) 6. F) 7. F) 8. F) 9. F)

10. F)

Lesson No: 13Topic: ElectricityShort Answer Questions

Q1. What kind of cell is used in a wrist watch?

Ans: Button cell is used in a wrist watch.

Q2. Name the two terminals of a dry cell?

Ans: The positive (+) terminal and the negative (-) terminal of a dry cell.

Q3. What is an electric circuit?

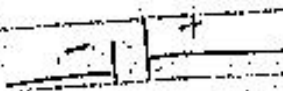
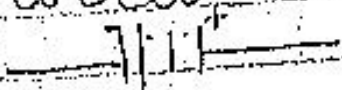
Ans: An electric circuit is the closed path in which electric current flows.

Q4. What is the direction of electric current in an electric circuit?

Ans: The direction of flow of electric current in a circuit is from the positive terminal of the cell to the negative terminal.

Q5. What is a circuit diagram?

Ans: A circuit diagram is a simple way of showing an electric circuit using symbols. For example, there are

Symbols for a cell 
 a battery 
 and wire 
 and so on.

Q6. which device is normally used to open or close an electric circuit?

Ans. Switch is normally used to open or close an electric circuit.

Long Answer Questions

Q1. How is a dry cell different from an automobile battery?

Ans. An ^{electric} cell is used in torches, alarm clocks, transistor radios, cameras and so on, is called the dry cell. A dry cell produce less electricity than a automobile battery. It cannot be used again once its chemical are used up to automobile batteries can be charged and used again. Dry cell are known as primary cell whereas automobile battery is said to be secondary cells.

Q2. How does an electric bulb work?

Ans. A thin wire connected between two thick short wires enclosed in a glass bubble. The bulb also has terminals which

these thick wires are internally connected to. The thin wire glows when electricity passes through it. This wire is called the filament of the bulb. If the filament is broken, the bulb is said to be fused and it does not glow.

Q3. List four essential components of an electric circuit and give the function of each.

Ans: The four essential components of an electric circuit are:

1. The battery is used to provide power to the circuit.
2. The Switch is used to open or close the circuit as you please.
3. The connecting wires used to connect the negative and the positive terminals of the battery.
4. The bulb is used to detect whether the circuit is working or not. If it is working, the bulb will glow and if it is not, the bulb will not glow.

Q4 Distinguish between conductors and insulators, giving examples of each.

Ans. Conductors are materials which allow electric current to flow through them. All metals, alloys of metals, graphite and some liquids are examples of conductors.

Insulators are materials that do not allow electric current to flow through them. Non-metals (except graphite) wood, glass, plastic, pure water and dry air are examples of insulators.

A) Choose the correct option.

1. b) 2. b) 3. c) 4. c) 5. d)

6. c) 7. d) 8. c) 9. a) 10. a)

B) Fill in the blanks.

1. Solar 2. -ve 3. Electricity 4. Switches

5. Circuit 6. closed 7. good.

C) True / False

1. T) 2. T) 3. T) 4. F) 5. T) 6. T) 7. T)

8. T)