



Std 5 Science

Ch 3: The Earth and its Living World – Q Bank - Answers

Exercises

Can you tell?

(1) Where do you get water from?

Rain is the main source of water. Apart from rain water, we get water from the various water sources on the Earth e.g. rills, brooks, streams, rivers, pond and lakes. We get water also from ground water in the dug wells and bore wells. Water is also available in the form of ice and in the seas and oceans.

(2) Where do we lay the foundation of buildings?

The foundation of the house and buildings are layed deep in the ground in the lithosphere.

(3) What need do we meet through breathing?

When we breathe we are able to supply oxygen to our body and thus able to live.

(4) From where does the earth get light and heat?

Our Earth gets its light from the Sun.

Use your brain power!

(1) In which layer of the atmosphere do we see the rainbow?

We see the rainbow in the troposphere.

(2) Mountaineers carry oxygen in cylinders when they climb mountains that are more than 5000m high. What could be the reason for that?

As we go higher from the surface of the earth, the air in the atmosphere becomes rarer. There is less oxygen in the air. So mountaineers carry oxygen in cylinders when they climb mountains that are more than 5000m high in order to breathe.

Textual Exercises

1. What's the solution? Dark patches appear on the skin after exposure to the sun.

The sun's ultra violet rays are harmful to the skin. Over exposure to the sun causes the skin to burn and therefore dark patches are seen on the skin.

2. Use your brain power!

(a) Why are micro-organisms important?

All animals, plants and micro-organisms are dependent on one another. So for the completion of the food chain micro-organisms are important.

(b) Think about all the foodstuffs obtained from the sea. Find more information and write ten lines about them.

Man has always been fascinated by the sea. And as man started venturing deep into the sea, man was able to hunt the sea creatures and adapted himself in consuming it. All kind of sea life is included in seafood i.e. fish, shellfish and edible sea plants. Fresh water organisms are all consumed and are included in seafood.

The harvesting of wild seafood is usually known as fishing or hunting, while the cultivation and farming of seafood is known as aquaculture or fish farming.

Most of the seafood harvest is consumed by humans, but a significant proportion is used as fish food to farm other fish. Some seafoods (i.e. kelp) are used as food for other plants (a fertilizer). In these ways, seafoods are used to produce further food for human consumption. Also, products such as fish oil tablets are extracted from seafoods. Some seafood is fed to aquarium fish, or used to feed domestic pets such as cats. A small proportion is used in medicine, or is used industrially for nonfood purposes (e.g. leather).

3. Answer the following questions.

(a) What are clouds made of?

Water on the earth evaporates continuously due to the heat of the sun. As water vapour is lighter than air, it rises high up into the atmosphere. As it goes higher, it cools and condenses forming very fine droplets of water. The droplets are so small and light that they float in the atmosphere forming clouds.

(b) What is meant by 'biosphere'?

Living things and all the parts they occupy are together called the biosphere.

(c) Make a list of the landforms you see in your surroundings and give a description of any two of them.

The various landforms we see are island, seashore, plains, plateau, hillock, hill, valley, mountain pass and mountain.

A hill is a landform that extends above the surrounding terrain. It often has a distinct summit, although in areas with scarp or dip topography a hill may refer to the particular section of flat terrain without a massive summit.

A mountain is a large landform that rises above the surrounding land in a limited area, usually in the form of a peak. A mountain is generally steeper than a hill. Mountains are formed through tectonic forces or volcanism. These forces can locally raise the surface of the earth. Mountains erode slowly through the action of rivers, weather conditions, and glaciers. A few mountains are isolated summits, but most occur in huge mountain ranges.

4. In the following sentences, underline the words that refer to landforms.

(a) Anil lives at the foot of a hill.

(b) Ria lives in the plateau region.

5. Write a note about the following.

(a) Evaporation: The process of water changing from its liquid state to gaseous state in the form of water vapour is called evaporation.

The water on the surface of the earth forms water vapour due to the heat of the sun. This water vapour rises up and forms into clouds.

(b) Condensation: The process of water changing from its gaseous state to its liquid state is called condensation. On the Earth, when the water vapour rises up, it starts cooling and changing into water droplets.

(c) The water cycle: Water on the earth evaporates continuously due to the heat of the sun. As water vapour is lighter than air, it rises high up into the atmosphere. As it goes higher, it cools and condenses forming very fine droplets of water that form into clouds. These small droplets join together and form bigger drops which are heavy. They cannot float. Such drops of water fall down on the earth in the form of rain. These processes of evaporation, condensation and rainfall go on in a continuous cycle. This is known as the water cycle in nature.

6. Give two examples of each.

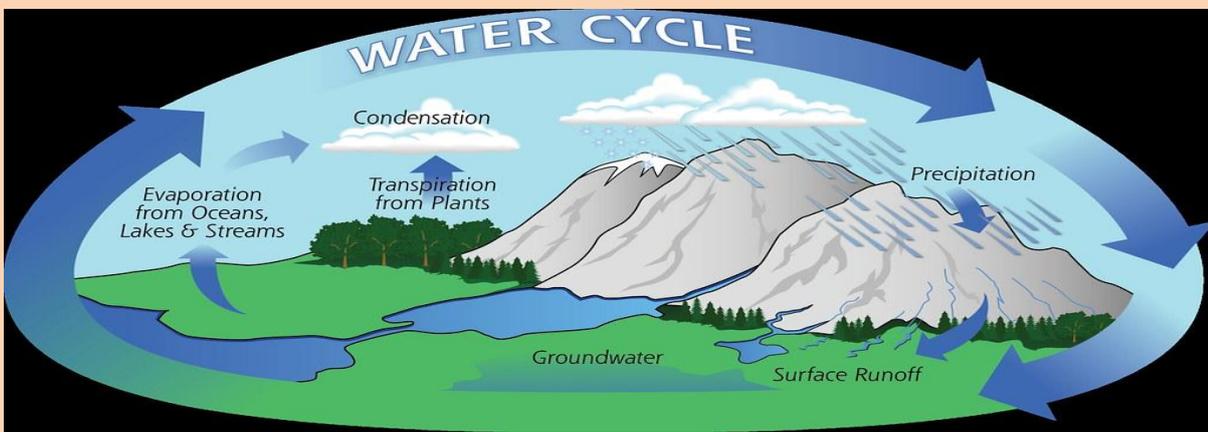
(a) Weather-related events:

- 1) Cyclones
- 2) Floods

(b) Sources of water:

Rain is the main source of water. Apart from rain water, we get water from the various water sources on the Earth e.g. rills, brooks, streams, rivers, pond and lakes. We get water also from ground water in the dug wells and bore wells. Water is also available in the form of ice and in the seas and oceans.

7. Draw a labelled diagram showing the water cycle.



Fill in the blanks:

1. On the surface of the earth, we find land in some places and water in others.
2. The earth is surrounded by the atmosphere.
3. There are living things on land, in water and in the air.
4. The sun is the cause of many natural processes on the earth.
5. Water, land and air constitute envelopes of the earth, namely, the hydrosphere, lithosphere and atmosphere.
6. The earth's crust is hard and is mainly made of rock.
7. All these land features are a part of the earth's lithosphere.
8. A vast continuous stretch of land is called a continent.
9. The land on earth is divided into seven continents.
10. The seven continents are Asia, Europe, Africa, North America, South America, Antarctica and Australia.
11. Asia is the largest continent and Australia the smallest continent.
12. Two-thirds of the earth's surface is covered with water.
13. Most of this water is in the oceans.
14. Ocean water is salty.
15. The five oceans are the Atlantic, Pacific, Arctic, the Southern Ocean and the Indian Ocean.
16. The land along the margins of an ocean is called the coastal region.
17. Rivers which join to make a bigger river are called its tributaries.
18. A river that cascades down a sudden drop forms a waterfall.
19. All rivers eventually flow into the ocean.
20. A water body formed by water collecting naturally in a low-lying area of land is called a lake.
21. The huge blocks of ice floating in the sea are called icebergs.
22. Water stored in the underground layers of rock is called groundwater.
23. Many lakes and wells get water from underground springs.
24. The water or ice that occupies the earth's surface, groundwater and the water vapour in the atmosphere together form the earth's hydrosphere.
25. The envelope of air around the earth is called the atmosphere.
26. As we go higher from the surface of the earth, the air in the atmosphere becomes rarer.
27. The atmosphere consists of a mixture of gases, namely, nitrogen, oxygen, water vapour and carbon dioxide.
28. The layers of the atmosphere are named as the troposphere, stratosphere, mesosphere, ionosphere and exosphere.
29. The layer that extends from the earth's surface to a height of about 13 km is called the troposphere.
30. Almost all the water vapour in the atmosphere is contained in the troposphere.
31. All weather-related phenomena such as formation of clouds, rain, fog, winds and storms take place in the troposphere.
32. Aeroplanes fly in the higher parts of the troposphere.
33. Beyond the troposphere, up to a height of about 50 km from the earth is the layer called the stratosphere.
34. In the lower part of the stratosphere, there is a layer of a gas called ozone.

35. Ultraviolet rays coming from the sun are harmful for living things. 36. The ozone layer absorbs the ultra violet rays and protects the living world.
37. Water on the earth evaporates continuously due to the heat of the sun.
38. The processes of evaporation, condensation and rainfall go on in a continuous cycle and known as the water cycle.
39. The polar bear is seen only in the snowbound polar regions.
40. Zebras are found in Africa and kangaroos are found only in Australia.
41. Living things exist in the lithosphere, hydrosphere and atmosphere.
42. All animals, plants and micro-organisms are dependent on one another.
43. The water cycle on earth goes on continuously.
44. Living things and all the parts they occupy are together called the biosphere.

Answer the following

1. Name the three spheres of the earth.

The three spheres of the earth are Lithosphere, Hydrosphere and Atmosphere.

2. What is biosphere?

Living things and all the parts they occupy are together called the biosphere.

3. What is a continent?

A vast continuous stretch of land is called a continent.

4. Name the seven continents

The seven continents are Asia, Europe, Africa, North America, South America, Antarctica and Australia.

5. Which is the largest and which is the smallest continent?

Asia is the largest continent and Australia the smallest.

6. What are landforms? Name the different landforms.

The land is not even in all places. The unevenness gives different shapes to the land in different places. They are called landforms.

Island, seashore, plains, plateau, hillocks, hills, valleys, mountains, etc are the different landforms.

7. Name the five oceans.

The five oceans are the Atlantic, Pacific, Arctic, the Southern Ocean and the Indian Ocean.

8. What is a coastal region?

The land along the margins of an ocean is called the coastal region.

9. Name the different water bodies formed along the coast.

Water bodies of different shapes and sizes are formed along the coast, for example, sea, bay, strait, gulf, creek, etc. These water bodies are part of the ocean.

10. Name the different streams of water.

The streams of water are rills, brooks, streams or rivers. Rills are the smallest and rivers, the biggest.

11. What are tributaries?

Rivers which join to make a bigger river are called its tributaries.

12. How are waterfalls formed?

In some places, a river cascades down a sudden drop. This forms a waterfall.

13. What is a lake?

A water body formed by water collecting naturally in a low-lying area of land is called a lake.

14. What is a glacier?

Water particles in the clouds freeze and in cold regions, they come down in the form of snow. When layers of snow pile up on the ground, they form ice. When such layers of ice pile up in a low-lying area, they become enormous in size. This huge mass slips down a slope at a very slow speed. This is called a glacier.

15. What are icebergs?

There are huge blocks of ice floating in the sea. They are called icebergs.

16. What is ground water?

There is a lot of water stored in the underground layers of rock. It is called groundwater.

17. From where do lakes and wells get water?

Lakes and wells get water from underground springs.

18. What is hydrosphere?

The water or ice that occupies the earth's surface, groundwater and the water vapour in the atmosphere together form the earth's hydrosphere.

19. What is atmosphere?

The envelope of air around the earth is called the atmosphere.

20. Name the layers of the atmosphere.

The layers of the atmosphere are the troposphere, stratosphere, mesosphere, ionosphere and exosphere.

21. Why is the ozone layer important?

Ultraviolet rays coming from the sun are harmful for living things. But the ozone layer absorbs them and protects the living world from those rays.

22. What is a water cycle?

The processes of evaporation, condensation and rainfall go on in a continuous cycle. This is known as the water cycle in nature.

23. What is lithosphere?

The earth's crust and a small hard portion of the layer under it is called the lithosphere.