Lesson-5(Geography)

Major Domains of the Earth

1. What is ‘Atmosphere’? Why atmosphere is so important?

Ans. The earth is surrounded by a layer of gas called the atmosphere. This thin blanket of air is an integral and important aspect of the planet. It provides us with the air we breathe and protects us from the harmful effects of sun’s rays.

2. Why do mountaineers carry oxygen cylinders with them?

Ans. The climbers experience problems in breathing as density of air decreases rapidly as we go up. That’s why they carry oxygen cylinders with them to be able to breathe at high altitudes.

##### 3. Write a short note on the continent – Antarctica.

Ans. Antarctica, completely in the Southern Hemisphere, is a huge continent. The South Pole lies almost at the centre of this continent. As it is located in the South Polar Region, it is permanently covered with thick ice sheets. There are no permanent human settlements. Many countries have research stations in Antarctica.

##### 4. What is the height of the Mt Everest? Who were the first men to climb the highest mountain peak Mt. Everest on the planet earth on 29th May, 1953?

Ans. The highest mountain peak Mt. Everest is 8,848 metres above the sea level. Edmund Hillary (New Zealand) and Tenzing Norgay Sherpa (India) were the first men to climb the highest mountain peak Mt. Everest on the planet earth on 29th May, 1953.

##### 5. Write about Pacific Ocean.

Ans. The Pacific Ocean is the largest ocean. It is spread over one-third of the earth. Mariana Trench, the deepest part of the earth, lies under the Pacific Ocean. The Pacific Ocean is circular in shape. Asia, Australia, North and South Americas surround it.

##### 6. What is the composition of the Atmosphere?

Ans. The atmosphere is composed mainly of nitrogen and oxygen, which make up about 99 per cent of clean, dry air. Nitrogen 78 per cent, oxygen 21 per cent and other gases like carbon dioxide, argon and others comprise 1 per cent by volume.

##### 7. Explain the following terms:

##### a.   Isthmus

      A narrow strip of land joining two landmasses is called Isthmus.

##### b.   Wind

      Moving air is known as wind.

##### c.   Strait

     A strait is a narrow of water connecting two large water bodies like seas and oceans.

##### d.   Biosphere

     The biosphere is the narrow zone of contact between the land, water and air. It is the zone where life exists.

##### e.   Lithosphere

      The solid portion of the earth is called the Lithosphere.

##### f.    Hydrosphere

    Water covers a very big area of the earth’s surface and this area is called the Hydrosphere.

8. Distinguish between the lithosphere and the hydrosphere.

Ans.

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| --- | --- |
| **Lithosphere** | **Hydrosphere** |
| 1. The solid portion of the earth on which we live is called the Lithosphere. | 1. Water covers a very big area of the earth’s surface and this area is called the Hydrosphere |
| 2. It comprises the rocks of the earth’s crust and the thin layers of soil that contain nutrient elements which sustain organisms. | 2. Water in oceans and rivers and in lakes, ice in glaciers, underground water and the water vapor in atmosphere, all comprise the hydrosphere. |

9. Why air temperature decreases with increase in height?

Ans. Air temperature decreases with increase in height because Earth's atmosphere is heated upward from the lowest level. Though sunlight passes through the higher altitudes before reaching the earth’s surface but the earth surface is much better at absorbing the solar heat.

10. Give reason why biosphere is important for living organisms?

Ans. The biosphere is the narrow zone of contact between the land, water and air. It is this zone where life exists. There are several species of organisms that vary in size from microbes and bacteria to huge mammals. All the living organisms including humans are linked to each other and to the biosphere for survival.

11. Write a short note on continent Asia.

Ans. Important fact about Asia

     1.   Asia is the largest continent.

     2.   It covers about one third of the total land area of the earth.

     3.   The continent lies in the Eastern Hemisphere.

     4.   The Tropic of Cancer passes through this continent.

     5.   Asia is separated from Europe by the Ural mountains on the west

     6.   The combined landmass of Europe and Asia is called the Eurasia (Europe + Asia).

12. Write some characteristics of the continent - Africa.

Ans. Following are the characteristics of the continent - Africa.

      1.   Africa is the second largest continent after Asia.

      2.   The Equator runs almost through the middle of the continent. A large part of Africa lies in the Northern Hemisphere.

      3.   It is the only continent through which the Tropic of Cancer, the Equator and the Tropic of Capricorn pass.

      4.   The Sahara Desert, the world’s largest hot desert, is located in Africa.

      5.   The continent is bound on all sides by oceans and seas.

      6.   The world’s longest river the Nile flows through Africa.

13. List some features of the Europe continent.

Ans. Here are some features of the Europe continent:

      1.   Europe is much smaller than Asia.

      2.   The continent lies to the west of Asia.

      3.   The Arctic Circle passes through it.

      4.   It is bound by water bodies on three sides.

14. How is the continent of North America different from that of South America?

Ans. North America

     1.   North America is the third largest continent of the world.

     2.   It is linked to South America by a very narrow strip of land called the Isthmus of Panama.

     3.   The continent lies completely in the Northern and Western Hemisphere.

     4.   Three oceans surround this continent are Pacific Ocean, Atlantic ocean and arctic Ocean.

       South America

     1.   South America lies mostly in the Southern Hemisphere.

     2.   The Andes, world’s longest mountain range, runs through its length from north to south.

     3.   South America has the world’s largest river, the Amazon.

 15.Write short note on

Atlantic Ocean, Artic Ocean and Indian Ocean

Ans. Atlantic Ocean

The Atlantic Ocean is the second largest Ocean in the world. It is ‘S’ shaped. It is flanked by the North and South Americas on the western side, and Europe and Africa on the eastern side. The coastline of Atlantic Ocean is highly indented which provides ideal location for natural harbors and ports.

Arctic Ocean

The Arctic Ocean is located within the Arctic Circle and surrounds the North Pole. It is connected with the Pacific Ocean by a narrow stretch of shallow water known as Berring strait. It is bound by northern coasts of North America and Eurasia.

Indian Ocean

The Indian Ocean is the only ocean named after a country, that is, India. The shape of ocean is almost triangular. In the north, it is bound by Asia, in the west by Africa and in the east by Australia.