6. Natural Regions

Can you tell? Tick the boxes in the pictures using the index given on page 31.

Housing

Clothing

Flora and Fauna

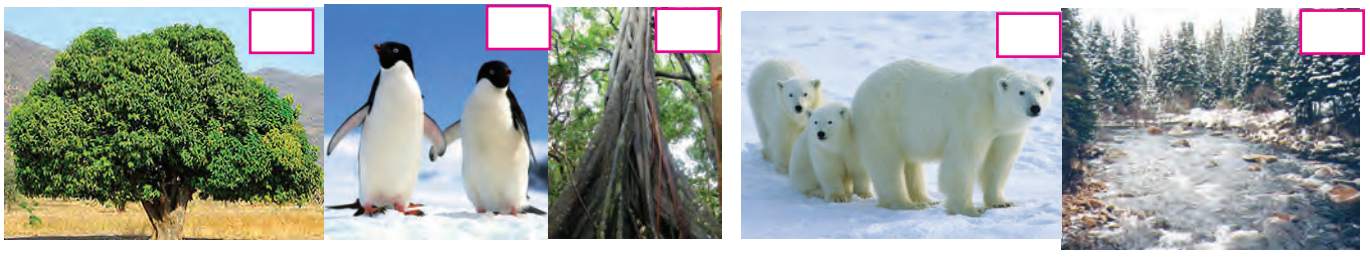
Food

On the basis of the selection you have done and the questions given below, arrange a discussion in the class.

- Why are all the house types shown in the pictures not seen in our surroundings?
- Which are the regions where such types of houses are found?
- Would you like to stay in a house built of ice? Why don't we build such houses?
- What brings about differences in people's clothing?
- Where do you think khubz, insects and ants also form a part of the diet of the people?
- Can the animals from polar regions like polar bears and penguins be kept in tropical zoos?
- Are all the plants shown in the pictures found in our surroundings? If not, where do you think they can be found?

There exists a large number of different things in the world than those we see in our surroundings. We see different educational and informative TV programmes about wild life. We become curious to know more about this wild life. Why is this wild life not seen in our areas? Why are they not similar to the wild life found in our areas? What causes this difference? Let us try to find the reasons behind all this.

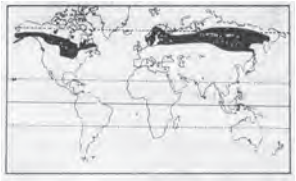
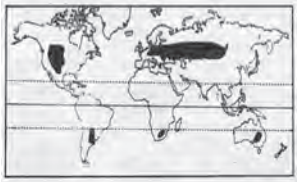
Index: (1) I use/experience! ✓ (1) I have seen! ★ (1) I do not know about it! ✗



Geographical explanation

There are differences in terms of landforms, climate, soils, etc in different parts of the world. This difference is mainly due to the availability of sunlight and water in that region. The availability of sunlight and water keeps on changing from the equator to the poles. You have studied this in the previous standards. Differences in landforms, climate and soil greatly influence the flora, fauna and human life and give rise to variations in the biodiversity in different parts of the world.

On the other hand, there are similarities of climate, vegetation and animal life in different continents that spread between certain latitudes. These similarities stand out as the distinctive features of these regions. As these regions stand out on the basis of natural factors, they are called natural regions. The natural environment of such regions affects the living world including human beings. The entire land area on the earth can be divided into these natural regions. Let us try to understand their distribution with the help of maps and tables given in this lesson.

Region	Location and extent	Climate
Tundra Region 	• Between 65° to 90° parallels • Greenland, N. Canada, N. Europe N. Asia.	• Mean summer temperature 10°C • Mean winter temperature approximately -20 to -30°C • Mean annual rainfall 25 to 300 mm • Very cold climate
Taiga Region 	• Approximately between 55° and 65° N. parallels. From Alaska to the Atlantic coast. parts of Eurasia.	• Summer temperature 15° to 20°C • Winter temperature below 0°C. • Mean annual rainfall between 300 and 500 mm. • Rainfall in summer, snowfall in winter
Grasslands (Steppes and Prairies) 	• Between 30° and 55° north and south parallels in the interior parts of the continents. • Steppes (Eurasia), Velds (South Africa), Pampas (S. America), Prairies (N. America), Downs (Australia) etc.	• Summer temperature around 27°C. • Winter temperature below 0°C • Mean annual rainfall 400 to 600 mm. • Rainfall mostly during summers.
Hot Desert Region 	• Between 20° and 30° north and south parallels. • In the western parts of continents. Sahara (N. Africa), Colorado (N. America), Atacama (S. America), Kalahari (S. Africa), Thar (Asia), etc.	• Mean summer temperatures 30° to 45° C. • Mean winter temperature 20° to 25° C. • Tremendous heat and very low rainfall. • Nights are very cold.
Grasslands (SudanType) 	• Between 5° to 20° north and south parallels in both the hemispheres. • Savanna (Africa), Queensland (Australia), the Parkland (Africa), Llanos and Campos (S. America) and other grasslands.	• Summer temperatures around 35°C. • Winter temperatures around 24°C. • Rainfall around 250 to 1000 mm. • Hot and humid summer, warm and dry winter
Equatorial Region 	• Between 5° N and 5° S of the equator. • Malaysia, Indonesia, Singapore, Guinea, Congo basin, Amazon basin	• Summer temperatures around 30°C. • Annual rainfall between 2500 and 3000 mm. • High heat and rainfall throughout year. • Because of hot and humid climate, vegetal litter decomposes leading to diseases.

Natural vegetation	Animal life	Human life
• Short lived vegetal life. • Short grass, small shrubs, flowers, lichens, moss.	• Caribou, Reindeer, etc. • Polar bears, foxes, walrus and seal. • Animals with soft, thick fur.	• Hunting and fisheries. • Hide tents, igloo (tupik) houses. • Use of sledges. • Eskimo people. Tough life. Population distribution highly sparse.
• Coniferous forests. • Leaves are narrow, pointed; branches leaning towards the ground. Wood is light and soft. • Spruce, fir, pine, redwood, etc.	• Have soft and thick fur. • Caribous, elks, ermine, beavers, silver fox, minks, bears etc.	• Population is less. • Lumbering and hunting are major occupations. • Few agrarian activities.
• Extensive grass ranches are seen. • Short grasses growing in lumps. • Grass gets dried up in winter. • Elder, poplar trees are found	• Wild life includes deer, horses, dogs, wolves, bisons, rabbits, hares kangaroos, dingos etc. • Domesticated animals like sheep, goat, cattle, horse, donkeys are also found.	• Rearing animals is the main occupation. • Earlier people had a nomadic life. • Lived in hide tents (Yurts). • Kirgiz people are no more nomadic, now stay in well built houses. • Grow wheat.
• Thorny bushes with hardly any leaves. • Leaves are narrow, oily, have thick bark. • Once moisture in soil is consumed, plants die. • Examples: cactus, sisal, palm, date palm etc.	• Camels survive for days without water. • Number of animals living on the ground is less. • Daytime live inside the ground • E.g. snakes, rats, lizards, scorpions, etc. • Domesticated animals like horse, donkeys, sheep, oxen etc.	• Bedouins (Sahara), Bushmen (Kalahari) Aborigines (Australia) • Most of the needs get fulfilled through animals. • Agriculture is confined to river valleys and oases.
• Tall and thick grass. • Height of grass around 6 m. (Elephant grass) • Trees are rare and have umbrella like canopy. • Examples: acacia, agave, sisal, pineapple, cactus etc.	• Large number of herbivorous and carnivorous animals. • Nature has gifted them with speedy legs. • Skin of the animals has colorful spots or stripes/bands. • Examples: lion, cheetah, hyenas, wolf, zebra, giraffe, elephant, rhino, wild ox, buffalo, kangaroo, emu, etc.	• Houses are simple, with mud walls and thatched roof, • Without windows. • Short in height and dome shaped huts called kraals. • Hunting and rearing are main occupations. • Examples: main tribes include Zulu, Hausa, Masai, etc.
• Dense evergreen forests • Variety of trees and bushes. • Swampy land. • Tall hard-wooded trees. • Examples: mahogany, greenheart, rosewood, ebony, etc.	• A great variety in animals. • In marshy lands, crocodiles, anaconda and hippopotamus, etc. • Animals/Birds living on trees Examples: chimpanzee, gorilla, hornbills, etc. • Poisonous insects such as the tse-tse fly	• Human settlements are few. • Human life is dependent on nature. • Population is mostly tribal. • Houses are built on the trees. • Tribes like Pygmies (Africa), Boro Indians, Semang, etc.

Let's play : Prepare cards for each of the cells in the above table. Distribute the cards among students and play the game of finding other members of the family of natural regions.

The natural regions given in the table are found in specific latitudinal extents between the equator and the poles. Availability of water and temperatures found there determine the location and extent of these regions.

Besides the regions mentioned above, there are some more regions which stand out due to local conditions. They are the Monsoon, the Mediterranean and the West European regions. While the Monsoon and West European regions stand out because of specific winds blowing there, the Mediterranean region is known for its rainfall in winters. These are described in the table below.

	Monsoon Region	Mediterranean Region	West European Region
Location and Areas:	• North and south of the equator between 10° and 30° N & S parallels. • Areas: Indian subcontinent, Philippines, West Indies, N. Australia, E. Africa, C. America, etc.	• Extends between 30° and 40° parallels in both the hemispheres on the western side of continents. • Portugal, Spain, Algeria, Turkey, California, Central Chile, SW and NE Australia etc.	• Located in the western parts of continents between 45° and 65° N and S. parallels, Norway, Denmark, Ireland, British Colombia, South Chile, New Zealand, etc.
Climate	• Summer temperatures between 27° and 32°C • Winter temperatures 15° to 24°C. • Rainfall 250 to 2500 mm. • Areas get rains in specific seasons from SW Monsoon. • Rainfall is highly variable and distribution is quite uneven.	• Dry summers and rainfall in winters • Mean summer Temperature from 21° C to 27° C. • Winter temperature between 10° C and 14° C. • Mean annual rainfall 500 to 1000 mm. • It rains in winter.	• Mean summer temperature around 20°C, • Mean winter temperature around 5°C, • Mean rainfall between 500 and 2500 mm. • Rainfall mostly in the form of cyclones associated with Westerlies • It rains throughout the year. • Climate is mild.
Natural vegetation	• Semi-evergeen and decidous forests. • Vegetation depends on the distribution of rainfall. • Banyan, peepal, teak, sal, sheesham, sandalwood, cinchona, bamboo, acacia, shrubs, grasses etc.	• Thick, small and oily leaves. • Thick bark Examples: olive, oak, chestnut. • Grass in low rainfall regions. • Coniferous forests in mountainous regions.	• Green grasses all the year round. • Trees shed their leaves in winter. • Coniferous trees and short grasses – oak, beech, maple, elm, pine, spruce, poplar, etc.
Animal life	• Wild animals such as tigers, lions, leopards, cheetahs, elephants, wolves, boars, monkeys, snakes, peacocks, cuckoos, etc. • Domesticated animals: cattle, goats, horses.	• Due to animal husbandry domesticated animals are found in large numbers– goat, sheep, cow, mules, horses etc.	• Because of animal husbandry, domesticated animals in large numbers. • Wild animals include wolves, foxes, bears etc,
Human Life	• Large number of small hamlets. • Considerable difference in diet and costumes. • Population is mostly involved in primary occupations • Main occupation is agriculture.	• Seat of Greek and Roman civilisations. • Main occupation is agriculture. • Mostly fruit and flower cultivation. • Wheat and wheat products form the staple diet. • Colourful costumes.	• Industrious and enthusiastic people. • Have been mainly sailors and explorers • Use woollen clothing. • Have achieved progress in secondary and tertiary sectors.

Besides the nine regions given in the tables, there are certain other distinctive regions which stand out because of their specific continental locations. For example, the China type region, St. Lawrence region, etc. See the extent of these regions in fig. 6.1.

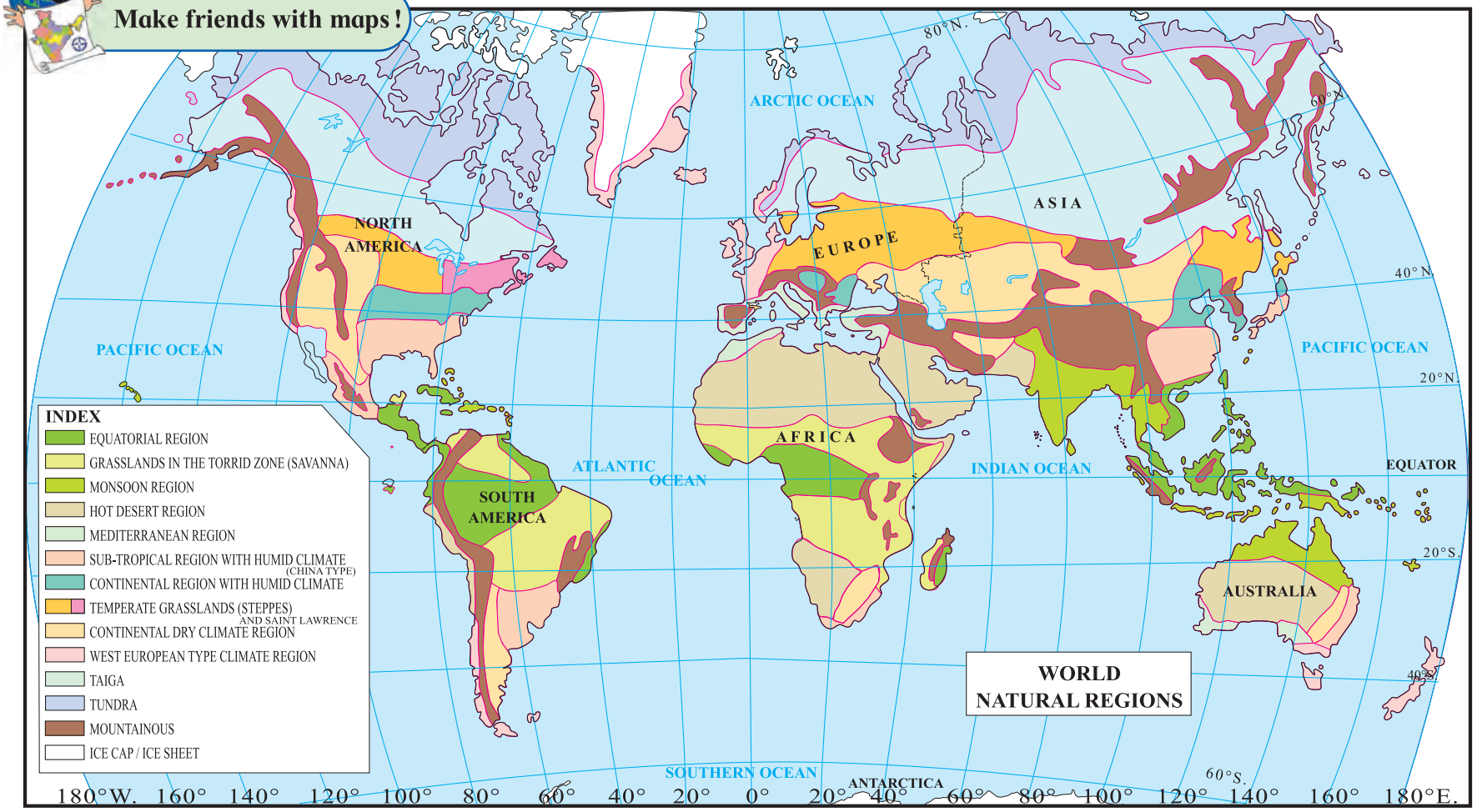


Figure 6.1 : Natural Regions of the World

Answer the following questions after studying the above map. (Fig. 6.1)

- Which natural regions are found in India?
- Which continent comprises a major portion of the hot desert type region?
- Which continent has the highest diversity in terms of natural regions?
- Why are there fewer natural regions in the southern hemisphere than those in the northern hemisphere?
- Which natural region occupies the largest area in the world?
- Where else do we find conditions similar to the continent of Antarctica?
- Through which natural regions does the Prime Meridian pass?

Answer the following questions:

- Which natural region consists of short-lived vegetation?
- In which natural region will you find the kraals?
- Which region has winter rains?
- In which natural regions are gorillas and chimpanzees found?
- In which natural region is the land surface in the forests devoid of vegetation?
- Which regions favour dairy farming?
- Which region is favourable for fruit production?

Think about it.

- Why are animals like lions not found in equatorial forests?

As one travels from the equator to the poles, the spectrum of biodiversity narrows down. This leads to the issue of availability of natural resources. This adversely affects human occupations. In monsoon regions, agriculture and allied activities form the main occupation of the people. In equatorial regions, occupations like gathering of gum, honey, rubber, lac, etc. are all based on forest produce. Taiga is a softwood forest. Therefore, lumbering is the main occupation there. In Tundra regions, the main occupation is hunting and fishing. Extensive farming is undertaken in grasslands nowadays.

Significant differences are found in the environment and available resources in different natural regions. The use of resources is dependent on that region's progress in science and technology. Similarly, the history and cultural organisation of that place also affects the life of the people.

Think about it.

- Why are the hot deserts mainly located along the western side of the continents?
- Why are people in the hot deserts engaged mostly in animal rearing?
- Why do people in hot deserts live a nomadic life?
- Why are carnivorous animals found in the grasslands?

Always remember–

Not only human life but the entire living world on the earth depends on the available natural resources. Hence, while utilizing these resources, we must think of all the living organisms. The concept 'the earth is one single family' will become a reality only if we do that.

Do you know ?

About 25% of the deserts on the earth are sandy deserts. Many of the deserts are occupied by rock exposures or covered by stony wastes and pebbles. Some have high hills with narrow rocky pinnacles. Deserts like Ladakh in our country or Arizona in the United States of America are of this type.

Strong winds blowing in the desert lift and deposit sand to make sandy hills or sand dunes. Some dunes can be as high as 200m. These hills do not remain stationary, but keep moving slowly under the influence of winds. At times, villages get buried under them.

Look for me elsewhere !

- Class Six- Geography- Page 48
- Class Six- Science- Diversity in living things and their classification.

Exercises

Q. 1 Read the following statements carefully. Correct the wrong ones and write them down:

(1) Due to its mild and warm climate, people from the West European region are not energetic.

(2) The prairie region is called the wheat basket of the world.

(3) The trees in the Mediterranean region have oily leaves and the bark is quite thick. There is a high rate of transpiration.

(4) The camel is an important animal of the hot desert region as it can survive without water and is useful for transport.

(5) Carnivorous animals like tigers and lions are found in large numbers in the equatorial regions.

Q.2. Give geographical reasons:

(1) People in monsoon region are mainly engaged in agriculture.

(2) Trees in equatorial forests grow tall.

(3) Vegetation is short-lived in the Tundra region.

Q.3. Answer the following questions:

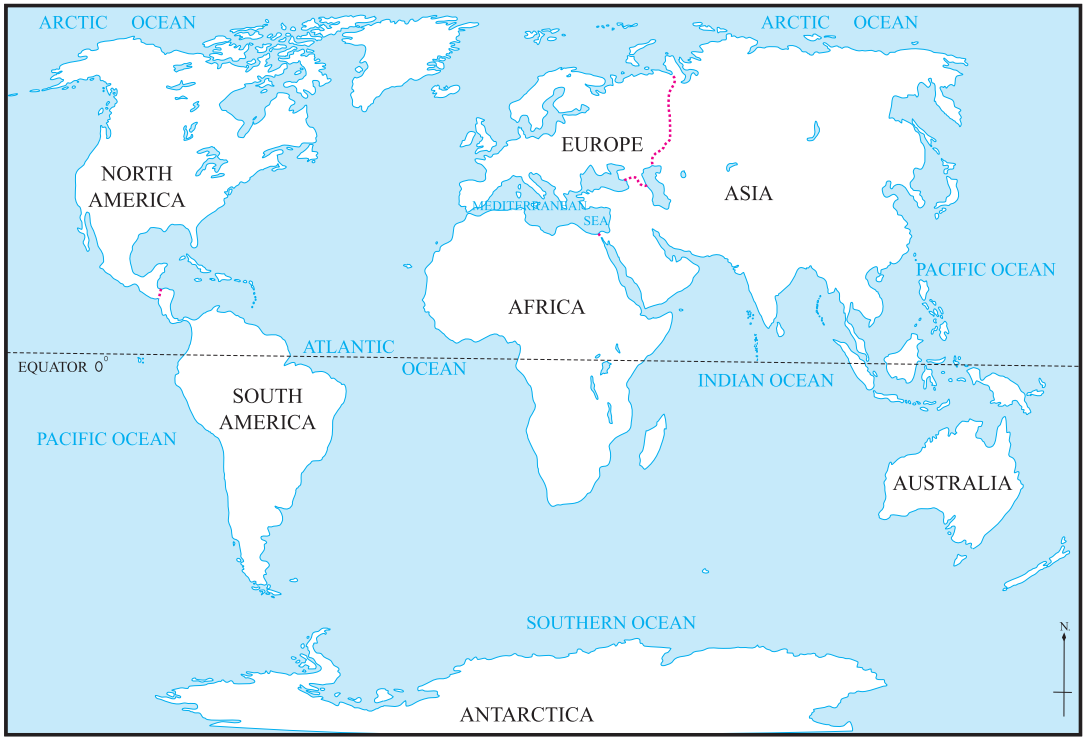
(1) What is the latitudinal extent of the Taiga region?

(2) Name any three herbivorous animals from the Sudan region. What has nature endowed them with for self-protection?

(3) What are the characteristics of the Monsoon region?

Q. 4. Show the following items on an outline map of the world. Prepare the index.

- Colorado Desert
- British Columbia
- Downs Grassland
- Inhabited part of Greenland
- Mediterranean Sea



Activity:

Using the Internet, check the information given in this lesson. Collect pictures of the flora and fauna and the human life of the various natural regions. Make a collage by pasting these pictures on the world map.

***

Project :

Till now, we have studied many geographical concepts. For example, latitude, longitude, graticule, climate of a region, its physical setup, flora and fauna, etc. Now, let us do a project related to all of these.

Using the internet and other sources, choose one country each from any two natural regions. Collect some information, photographs images, etc. regarding these countries. Then make a collage using the following points.

Name of the country : _____

Location and extent : _____

Climate : _____

Flora : _____

Fauna : _____

Human life: _____

Costumes : _____

Occupations : _____

Special features : _____

Map

4LZTKF

Arrange an exhibition of your collage posters in the classroom and make a presentation using them.

***