

CLASS-5
SOCIAL STUDIES
CHAPTER-6
WEATHER AND CLIMATE

A. Circle the correct options.

1. The region above the sea level are (hotter/**colder**).
2. The deserts receive (**low rainfall**/moderate rainfall).
3. Tropical wet regions receive (**high rainfall**/no rainfall).
4. Throughout the year, the Marine West Coast region remains (dry/**damp**).
5. The tundra is (**treeless**/waterless).

B. Fill in the blanks.

1. Humid continental region is found between **40° and 50°** latitudes.
2. Winters are very harsh in the **tundra** region.
3. Deciduous forests are found in the **humid continental** climate zone.
4. Deserts receive an annual rainfall of **10 inches**.
5. **Tropical wet** is called the seasonless climate zone.

C. Answer the following questions in short.

1. What are the characteristics of humid subtropical climate?

Ans: Humid subtropical climate experiences hot and humid summer and mild to cooler winter. It experiences long period of heat and humidity.

2. What are the factors affecting weather?

Ans: The factors affecting weather are cold, heat, rain, humidity, dryness, storm or cloud, clarity of sky or cloudiness.

3. What is humidity?

Ans: The amount of water vapour present in the air is called humidity. It regulates the precipitation or rainfall in an area.

4. What are the characteristics of tropical wet climate?

Ans: The characteristics of tropical wet climate are:

1. There is no great variation in temperature throughout the year.
2. This region remains very hot and humid.
3. There is everyday rainfall and receives 80 inches of annual rainfall.

5. Define tundra region.

Ans: Tundra region is the coldest region or permanently frozen ground for almost the entire year called permafrost. It receives less than 15 inches of annual rainfall. Here the summer is very short and winter is very harsh.

D. Answer the following questions in detail.

1. Differentiate between weather and climate.

Ans: Weather is the day-to-day change in atmospheric conditions. It tends to change very frequently and climate on the other hand, is a long-term evaluation of the atmospheric condition prevailing in a particular region. It covers larger areas.

2. How does altitude above the sea level affect the climate of a region?

Ans: Altitude above the sea level affect the climate of a region, as we move up from the sea level, the air pressure tends to decrease. It expands due to low pressure and gets colder, hence we experience colder temperature at higher altitude like at hill station.

3. Why is the equator so hot?

Ans: Due to the tilt of the Earth, the Equator is closer to the sun and so receives maximum or direct sunlight therefore it is so hot. The Equator has smaller surface area so heats up quickly compared to the poles. There is less atmosphere to pass through at the Equator compared to the poles.

4. How do ocean currents regulate weather?

Ans: Winds blowing in the oceans affect the climate of various regions. Ocean currents can warm up or chill down regions depending upon their source. When the warm ocean currents come to the cooler shores, they warm up the area. On the other hand, when cold currents reach warm areas, they cool those areas.

5. List two features each of the seven major climate zones.

Ans: Two features each of the seven major climate zones are as follows:-

TROPICAL WET

1. This region remains very hot and humid.
2. Rainfall is a daily affair for this region, and it receives about 80 inches of average annual rainfall.

DESERT

1. This region is dry and receives only 10 inches of annual average rainfall.
2. This area is not humid and there is great variation in temperature between day and night.

SEMI ARID

1. This region receives only 16 inches of annual rainfall.
2. This region has extremely hot summers and warm to cool winters.

MEDITERRANEAN

1. It is the zone of dry and hot summer and cold and rainy winter.
2. It is the zone of dense human settlement and excellent agricultural production.

HUMID SUBTROPICAL

1. It experiences hot and humid summer and mild to cooler winter.
2. It experiences long periods of heat and humidity.

MARINE WEST COAST

1. This climatic zone is regulated by warm oceanic currents and hence has a moderate temperature.
2. This zone remains cloudy, foggy and damp round the year.

HUMID CONTINENTAL

1. This zone has hot summer and cold winter.
2. It experiences variation in temperature and precipitation.

TUNDRA

1. This zone receives less than 15 inches of annual rainfall.
2. Summer is very short lasting only a few weeks. Winter is very harsh.

E. Think and answer.

1. How does water play an important role in regulating climatic changes?

Ans: Water play an important role in regulating climatic changes it regulates the precipitation or rainfall in an area. Thus, it brings a change in the overall climatic conditions.

2. Why is it necessary for us to have a good understanding of the climatic zone we want to travel to?

Ans: It is necessary for us to have a good understanding of the climatic zone we want to travel to because in different climatic zones have different climatic conditions and this climatic conditions vary from place to place.

3. What factors can cause a change in climatic conditions?

Ans: Following are the factors that cause a change in climatic conditions:-

1. Equator, the biggest gainer of sunlight
2. How high are we from the sea level?
3. Distance from the sea
4. Ocean currents
5. Moisture in the air and precipitation

EXPERIENTIAL LEARNING

Activity

1. Does the climate change very often?

Ans: No, the climate does not change very often.

2. Find out a few more countries falling in the seven major climatic zones?

Ans: The countries that fall in the seven major climatic zones are Central and South America, Africa, South Asia, South-east Asia, Indonesia, Northern Taiwan, northern Vietnam, Japan, London and Ireland.

3. Why is the tundra region called the treeless zone?

Ans: The tundra region receives less than 15 inches of annual rainfall and has permanently frozen ground for almost the entire year so this region is called the treeless zone.

4. How many seasons do we experience in India?

Ans: We experience four seasons in India namely summer, winter, autumn and spring.

5. How does ocean currents modify the climate?

Ans: Ocean currents can warm up or chill down regions depending upon their source. When the warm ocean currents come to the cooler shores, they warm up the area. On the other hand, when cold currents reach warm areas, they cool those area. Thus ocean currents modify the climate.