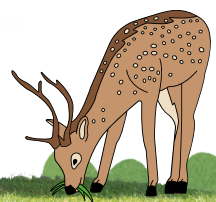


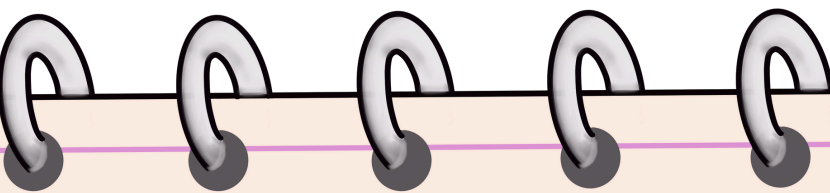
CHAPTER 6

NATURAL VEGETATION & WILDLIFE



CLASS 7





PRIYARANJAN KUMAR
MAED1240120
MA EDUCATION
AZIM PREMJI UNIVERSITY
SELF LEARNING WORKBOOK:
GRADE 7
CHAPTER 6: NATURAL
VEGETATION & WILDLIFE





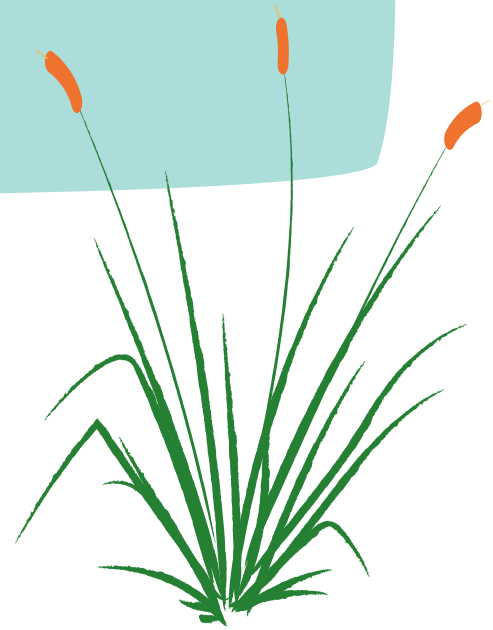
Note for facilitator

Dear Parents and Teachers,
Knowing this chapter 6: Natural Vegetation & Wildlife is an integral and important part of your child's learning, so thank you for supporting your child. This note tries to explain you why this workbook matters, how to use it in most effectively in children context, and what kind of role you have as a parents/teacher. Please read this carefully, because it will help children get the most effective learning from every activity and connect classroom ideas to real life. These concepts are directly linked to the children's daily life, such as how a tree grows in a certain environment. If they wanted to grow a tree, a forest, or vegetation, then they would need to know which kind of ecological environment is required for growth. In other words, this chapter asked to the children to look closely at where they live and to ask respectful questions to the elders. and try to small, useful solution with their hand and to understand the around them. In terms of parents, teachers, they'll guide and support to them in what they want to do and to make a rubric like students can make their good habits, like caring for the seeding, a clearer field, saving water resources, and tell them my story, which is ties the past and future. For example, water crisis, Deforestation, and others.



Note for Students

Hey, young explorer, In this week in this chapter, we will try to learn about how plants and animals grow near our village or around the world. You can go outside with an elderly person from your house and collect 3-4 or more different kinds of leaves and note where you found each leaf. whether that is a yard field, roadside, forest, or other places. You can make a colorful drawing of that leaf and, during the nature walk, observe the leaf's shape and its texture, and what is the height of the tree? and ask to your family member or an elderly person in your family, whether that is your mother, your friends, your teachers, your parents, your big brothers and big sisters, how the trees are growing. And what is their use? And what is seasonality? Or ask any story about that tree and write what you listen, what you think, what you understand, and if possible, plant a tree and give them regular water and note everything. For example, if you are giving some water, then write down which time you put them and what date? What is the height, and which kind of environment do you give them, for example in inside the home, outside the home, and which kind of soil you use to plant them and for security you can go always with your young elder and without consent or personal land do not go or plant any plant, and wear a hat. And what you asked and what you get from your parents about different kinds of leaves and plants. You can discuss with your friends in the classroom and make a poster, and write down all their details, their environment, and what you see around yourself. It can be the environment, rain, soil, everything. You can ask questions to your elders, and you are independent learner, you are explorer. So you can always ask questions and take enjoyment from them. In our country, different kinds of plants and animals are found. We have the right and need to know and understand all about them, and as aware citizens, we must know about all those things that are an integral part of our country, so that we can understand the lifestyle, food, climate, and animals of the people living there. And remember always one thing, we as human beings are an integral part of this nature. So we have need to respect them and protect them, and then they will protect us.



Chapter 6: Natural vegetation and wildlife.

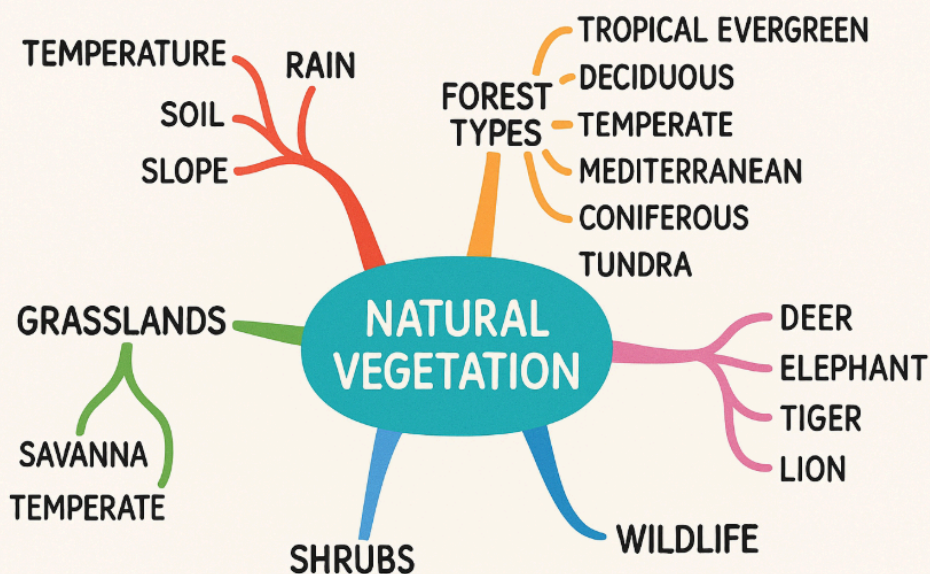
About This Unit:

Animals and plants grow in that places where they feel appropriate or suit them, and sometimes they adapt to their environment.



A place's height, temperature, rainfall, and soil slope decide which plant will grow there. When you will go from low-height land to high-height land, like mountains. You will see the clear differences between trees and animals. So in this chapter, we will try to understand those changes that kind of factor affects them to grow a plant or animal.

Overview of this chapter:





Before we go into a deep dive into the workbook, let's learn about ourselves. Below there is a K.W.L chart (Know, What, Learn), fill in the first two columns before you start the workbook and come to complete the last column once your workbook is complete. This chart will help you to see your thinking clearly and reflect on your own learning.



K.W.L

 <i>Fill in what you already know about Natural vegetation and wildlife</i>	 <i>What do you think about these topics? What do you want to learn?</i>	 <i>Reflect on the key insights you gained after completing the workbook.</i>



Activity 1:

On a slope, Salima also saw beautiful red-purple rhododendron flowers blooming like small bushes.

As the altitude increased near the flowers, the trees became fewer, and there were only small patches of grass and snow in some places. Then Salima asked her father curiously,

Imagine that you are sitting with Salima in a bus travelling to Manali in Himachal Pradesh. The bus started climbing upwards from the mildly warm mountain plains below. In the plains, Salima saw trees with dense and large leaves, like sal and teak. As the bus gained altitude, the air started getting colder, and the type of trees changed; and the large leafy trees became less visible, and in their place came coniferous trees with pointed leaves, whose leaves are like needles and which form cones, like deodar and Ashoka trees.



"Papa, as the bus climbed up, why did the trees keep changing? There were sal and teak trees below, in the middle there were pine trees with pointed leaves, and at the top there was only grass and snow."



Think

What are your thoughts on Salima's curiosity? If you know the answer to her question, please write it below.

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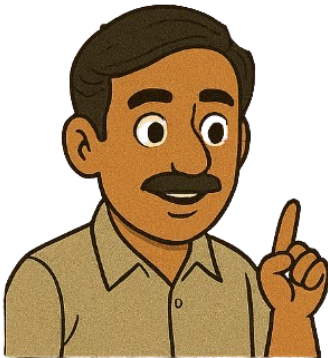




Salima, these are the Scientific laws of nature. As the altitude increases, the temperature decreases, and the moisture in the air also changes. At the bottom, where there is more heat and rain, broad-leaved trees like sal and teak grow. But as we climb higher, the air becomes cold and dry. Broad-leaved trees cannot survive there. That is why conifers are found there, such as pines and deodars. Their leaves are needle-like so that the snow slides easily, and they can survive even in the absence of water.



when we go higher, the soil becomes thin, the temperature drops a lot, and the ground remains frozen throughout the year. Trees cannot grow there, only small grasses or bushes are found. In some places, snow patches also remain on the ground throughout the year. This is the reason why vegetation changes with altitude." I will give you an example of our village. "Just like in our village, rice and sugarcane grow well in our farm because there is more heat and water. But on the upper hill slopes, people grow maize and potatoes because there is more cold and less soil. Every place has its own climate and soil-specific plants."



Salima learnt that as the altitude increases, the temperature becomes cooler and rainfall/moisture changes, so different plants grow there. Also, the steepness of the slope and the thickness of the soil determine which trees or plants can grow.



Bring five leaves of different plant near your home and write

1. Where I found it?
2. Why this plant grows there?
3. Which factor affecting in growing there like rain, soil, and temperature?

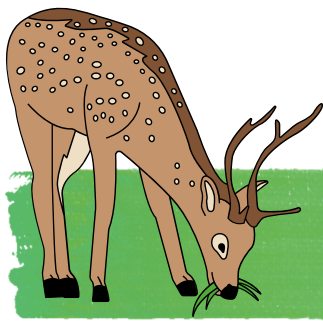
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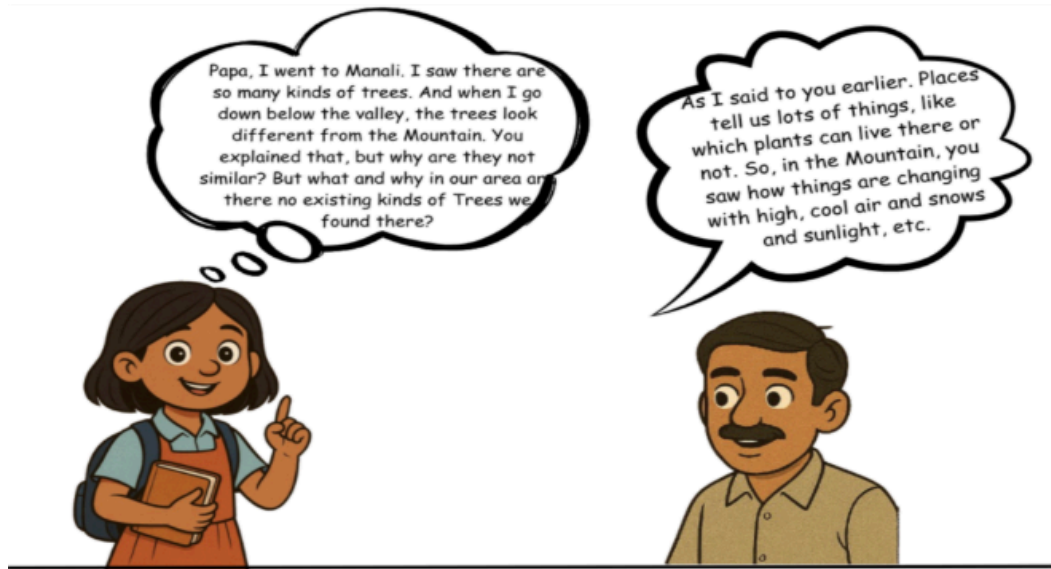
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Activity 2:

Read the short conversation with Salima's and her Papa. And then do some activities which are given below.



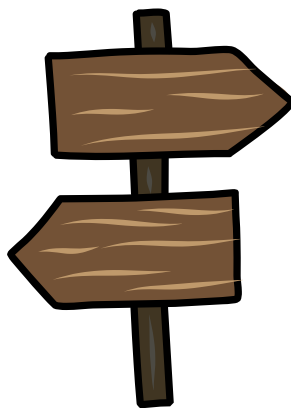
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So is a tree near our house the same as the tree on the mountain?



Today, we will see different types of forest of our Chhattisgarh and World and how it grow. First, do you understand what the meaning of forest? And characteristics of forests?



TREE

Single Plant



Wood



Medicines



Animal Homes



CO₂ Absorption



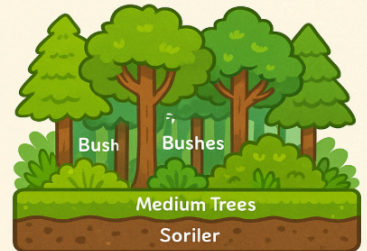
Water Conservation



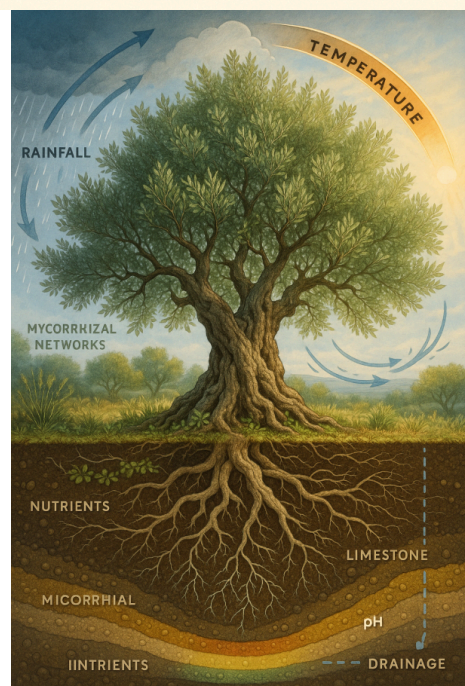
Environmental Balance

FOREST

Many Trees Together



What do you think about Salima's Papa's question? What do you know about it? Fill that in below.

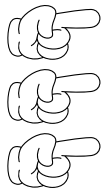
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Characteristics	Tropical Evergreen	Tropical Deciduous (Monsoon)	Temperate forest.
Canopy & Undergrowth.	• Very dense canopy. • Less light reaches the ground. • Many vines and shade loving plants.	• Canopy opens in the dry season. • More light reaches the ground when leaves fall. • Undergrowth varies from season to season.	• Layered structure visible. • The forest looks different across seasons due to the environment.
Leaf	Mostly Evergreen. And trees shed leaves year-round.	With evergreen deciduous trees, many trees shed a large number of leaves in the dry season.	Some trees are deciduous (lose leaves in winter); some are evergreen, depending on the rainfall and temperature of that mass of land.
Soil and moisture.	Deep, Moist, humus soils Because rainfall happens most of the year.	Red-loam or alluvial soil that becomes very wet in the monsoon and quite dry in summer.	Brown forest soils / thinner loam that holds moisture from seasonal rain and snow melt, and soils may freeze in winter.
Typical Trees	Evergreen hardwoods and wet-forest species. Like Rosewood Ebony, Wet-forest Dipterocarpus in northeast India.	Sal, Teak (sagwan), Neem, and Sheesham are broad-leaf trees that may shed in the dry season.	Oak, Beech, Maple, Chestnut; in the Himalayan temperate belts, oak, chestnut, some pines, and we can find first at higher belts in India.
Wildlife	Elephant. Monkey, Lemur, etc.	Lion. Tiger, Elephant, golden monkey etc.	Deer, Wolves, Fox, etc.
Why This type of forest Occurs	High Temperature + Heavy rainfall + Plain area	Seasonal monsoon+ Leaf shedding + wet and dry	Seasonal climate + mix vegetation + moderate rainfall.



You can see in the map below
where all types of natural
vegetation that grow in India are
shown in the map.

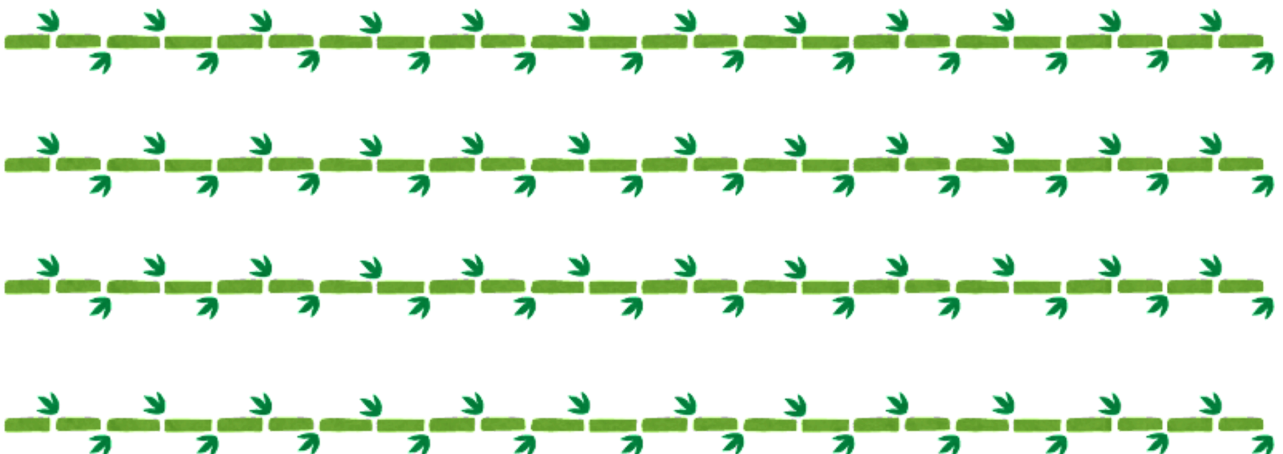
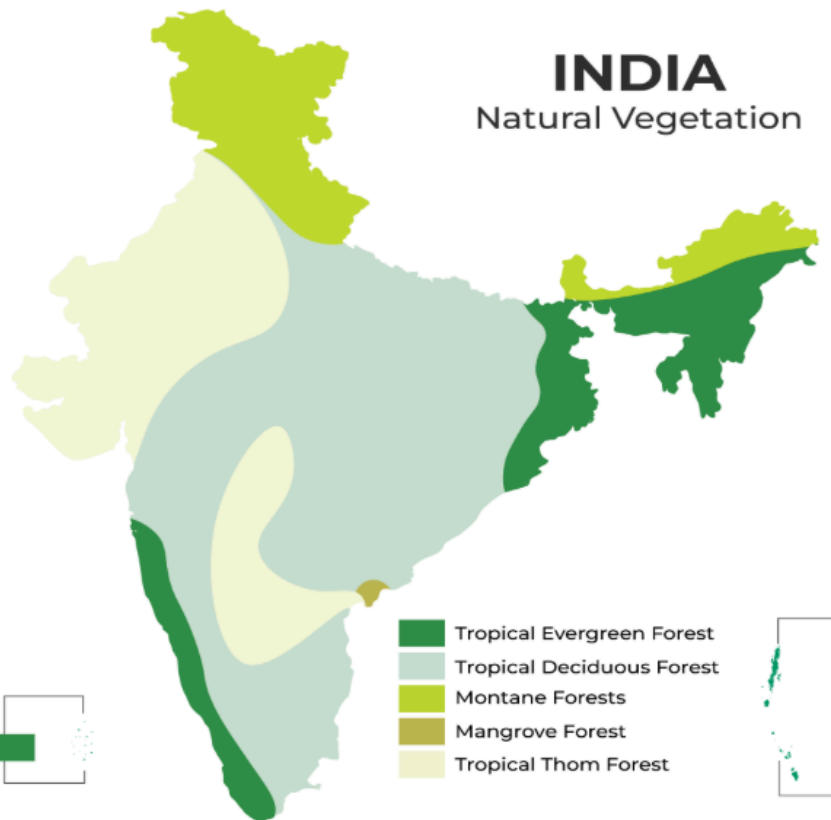
As in the previous activity, you
were asked to write about
some leaves and their
contributing factors, so check
that and find out which tree is
which and in which type of
forests found, classify it, and
make a picture of those leaves
or the tree here and write
about it.



Tropical Evergreen

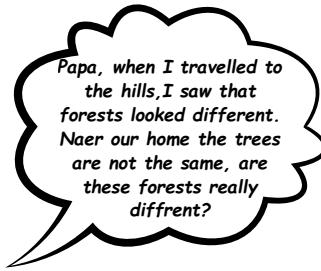
Tropical Deciduous (Monsoon)

Temperate Forest.

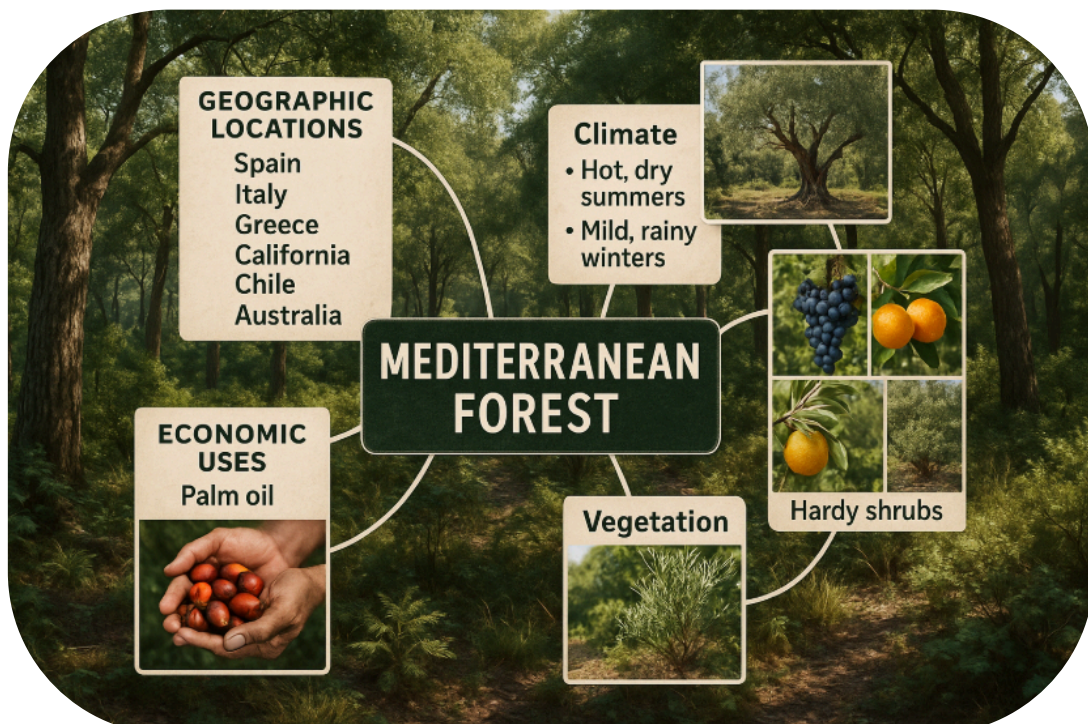




Activity 3:



Mediterranean forest: These forests. Grow around the Mediterranean Sea near Spain, Italy, and Greece. And some other part of like California, Chile, Africa, Australia. And these forests grow in hot and dry summer and mild rainy winter season. And trees grow like Olive, Grapes, Citrus fruits, and hardy shrubs. So many Palm oil is extracted from this kind of forest.





Think 

1. See this picture and tell me 3 things that you notice?

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2. And why do you notice it? Why is this different from other forest trees?

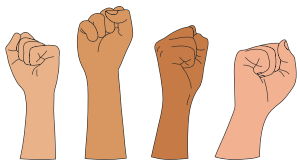
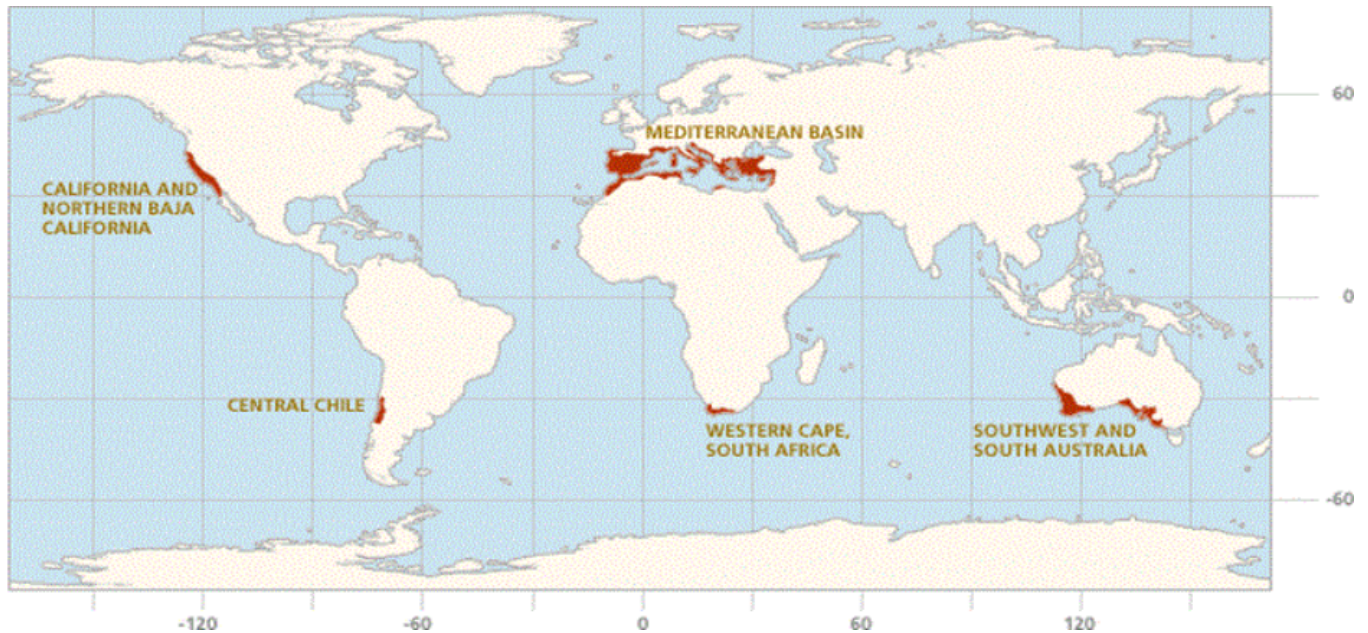
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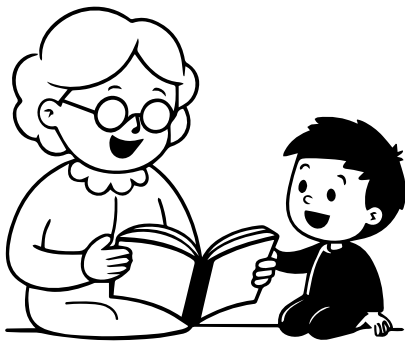
3. Tell if there is no rain, or happened too much then what will happen.

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Activity 4:



Note

Polar lands are very cold. As you see on the world map. The Antarctica and Arctic poles there is most coldest places on Earth.

So trees cannot grow there, only small plants like mosses and lichens live. And some special grow there, like snow leopard, arctic force, seal, rabbit, polar bear, oxen. Penguin etc.

Because there was no Sunlight or factors for growing trees. Which needs to. Grow trees that are not possible in that region, where there was no rain, no sunlight.



1. See this picture and tell me 3 things that you notice? size, color, land, animals.

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2. Think for a moment and write two sentences." Why, these size plants grow in the tundra forest? Because

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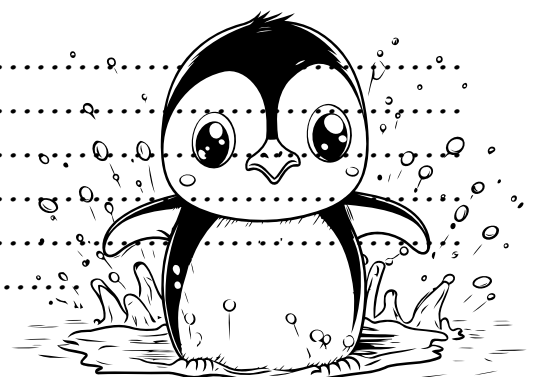
3. Because you didn't see the tundra forest, if you wanted to go there, then what two things would you want to see there?

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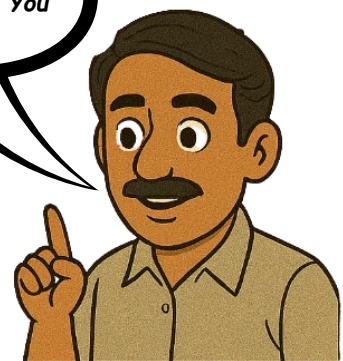


Tundra Animals



Activity 5:

Salima, as you learned about forests yesterday. But do you know there are also some places where few or not tall trees grow? And these are called grassland, they also have some animals and people depending on them. You know it.



Yes, Papa, I heard about it, but I didn't know about it. How does it grow because you explained to me yesterday about how rain, temperature, and all these factors affect trees or forests to grow, but No Tall trees? No Rainfall or less rainfall. why is this kind of Area called as a grassland?



“

Yes, I'll Tell You why.

"A land where a large open area where grasses are the main plants and few trees or scattered. These lands may have tall grasses or short grasses depending on the climate or factor of vagation, and they support many grazing animals and birds. This type of land call as a grassland area."

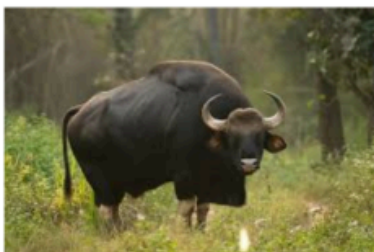
Grassland has several types

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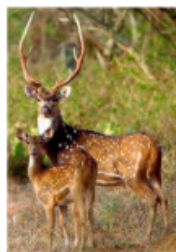


Tropical grassland (Savannahs): In this tropical region. There are hot trees and scattered trees, tall grasses. Examples like The Deccan plateau and central India, like areas of Maharashtra, Madhya Pradesh, Chhattisgarh, some open plains, and dry forest margins, Africa's Savannah, Brazil's Campos, and Venezuela's Leonos. And in terms of animals, there are elephants, Nilgai, Gaur, Blackbuck, zebras, giraffes, deer, and leopards. Animals you would find there.

Gaur



Chital



Nilgai



Grassland



Write One things for this:

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Temperate grassland: Its Flat, fertile plants, Few trees, Very useful for farming, Moderate rainfall and temperature. In terms of animal Wild buffaloes, bison, antelopes. There are high mountain meadows and also called bugyals or alpine meadows, in the higher Himalaya, like Uttarakhand, Himachal Pradesh, parts of Jammu & Kashmir, and Arunachal Pradesh. These are grasslands at higher altitude (not the flat prairies of other continents). You showed it when we went to Manali. And you can see Several types of animals like the Himalayan Tahr and Bharal. And so many migratory birds and small mammals use these meadows in the summer time.



Write One things for this:

Himalayan Tahr



Bharal (blue sheep)



Anser indicus



1.
2.
3.
4.



Write some answer of the question which is given in below.

1. Fill in the blanks.

A. large mass of land where many tree grows together it called

B. Some trees lose leaves in dry season. This forest called

C.kind of tree grows in cold polar regions(tundra).

D. & are examples of tundra forest trees' animals.

E. In Chhattisgarh..... Forest found.

2. Which factor mainly affects vegetation with height?

a.Type of soil b. Altitude. C. Farmer choice d. Rain

3. Explain how height and rain affect vegetation and give me some of your examples that you collected in the above activity.

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4. Explain how human use of land is changing forests in Deforestation. Except for cutting trees.

5. Do an interview with your elder and write one story about how local tree. Are playing an important role in your culture.

6. Write all the types of forests and how forests grow.

Fill the KWL chart and write what you learn from this chapter.

