

- A tropical rainforest can be divided into _____ different layers.
 - The top layer is the _____ layer.
 - Beneath that is the _____,
 - followed by the _____ layer, and finally,
 - at the bottom, the _____ floor.
- Each layer provides its own unique environment for forest life, and all layers work together to create the rainforest's _____.
- If you looked down at a tropical rainforest from above, you'd see a blanket of green. This is the _____ layer. It's where the topmost _____ of the trees emerge into the air.
- The tallest trees can reach around 60 meters, or _____ feet. That's around the height of a 20-story apartment building. Among the trees whose branches seem to touch the sky is the Brazilian nut tree, which can live up to _____ or even more.
- The _____ tree is another giant of the rainforest. So many creatures rely on this tree that the Sani Kichwa people of the Amazon rainforest called the kapok tree the father of all the _____.
- Who lives in the emergent layer so high off the ground?
 - Small gliding _____, _____, insects, and birds.
- _____, including white tailed hawks and harpy eagles, fly overhead, getting a bird's eye view of the prey in the branches.
- Below the emergent layer is the _____. The canopy is the _____ layer of the rainforest, and the most densely populated.
 - Dense= _____
- Most of the forest's _____ and _____ live in this layer.

- The canopy consists of interwoven _____, _____, and _____.
- It's about 20 feet thick and forms a kind of _____ over the forest below.
- Many canopy trees bear sweet fruit that attracts _____, two-toed _____, and birds like the toucan and scarlet macaw.
- Reptiles climb or slither up the trees to feast on the _____ and _____ that swarm through the canopy.
- Canopy trees in the Amazon rainforest include _____ trees, _____ trees, and dozens of different kinds of palms.
- The next level is the _____ layer.
- Down here, the forest gets even _____, quieter, and more _____. Some of the forest's largest animals live in the understory.
- In South America, _____ prowl the understory in search of prey.
- In Central Africa, _____, antelopes, and forest _____ inhabit the understory. _____ and green _____ lurk in the trees, preying on birds and small mammals.
- The forest floor is where everything is recycled. Leaves, bark, bones, and all kinds of other organic matter fall to the floor, where they decay and decompose (_____). _____, slugs, termites, and _____ help the process of decomposition along.
- _____ and _____ scavenge the forest floor for worms and grubs.
- The forest floor is thick and spongy and filled with fungi, _____, and tiny microorganisms too small to be seen.

- Eventually the rotting matter turns into _____ for the roots of trees. Everything in the tropical rainforest provides nutrition for something else.
- The rainforest also helps maintain the earth's _____ and weather cycles.

The Earth's Lungs: The Tropical Rainforest and Climate.

- Maybe you've read or heard that tropical rainforests produce oxygen for animals throughout the world to breathe.
- Actually, scientists have discovered this is _____.
- Tropical rainforests do produce oxygen, but almost all of it is used by the plants and creatures of the _____ itself.
- This means the rainforest biome is in _____.
- _____ is the process by which green plants grow.
 - Plants take in _____ and carbon dioxide from the air.
 - They synthesize (_____) these two elements into _____ and give off _____.
- Plants also use oxygen. At night when there is no sun, they absorb oxygen to help release the energy from the stored _____ in their leaves.
- Scientists estimate that the plants of the rainforest _____ about half the oxygen they produce. _____ and microbes in the forest use the other half.
- Large tropical rainforests use a lot of _____. By doing so they help keep the planet _____.

- What happens when rainforests help remove carbon dioxide from the air?
The air becomes cooler and the moisture begins to condense-
In other words, it starts to _____.
- Rain nourishes plants and animals.
- Some of it is absorbed into the _____.
- Some of it returns to the air through _____.
- In dense, humid tropical forests, water is always _____
and condensing. That puts the rain in rainforest.
- What happens when rainforests are cut down?
Less evaporation and transpiration means less _____.
- The destruction of the rainforest means the destruction of the thousands of the
unique _____ and _____ species that live there.
Some cannot survive outside their native habitat.

Medicine from the Tropical Rainforest.

- You might not think a poisonous snake could save someone's life. But the fer-de-lance viper from the Amazon rainforest might surprise you.
- Some people, though, suffer from high blood pressure, a condition that can lead to _____ or _____.
- Scientists isolated the substance in the viper's venom that caused blood pressure to drop. Just a little bit of this chemical could help instead of hurt.
- It reduced blood pressure just a bit without harming the patient.
- Once this substance could be produced synthetically
(_____), millions of
patients could lead healthy and productive lives.

- When it comes to flowers, the Madagascar periwinkle is more than just a pretty face. Native people of the forest call it the flower of life. Found in the tropical rainforests of Africa, this small, pink blossom has helped us conquer acute lymphocytic _____, or ALL, one of the most common _____ of children and teens.
- Throughout most of its history, ALL had no cure. Anyone with the disease died an early death. Medicines extracted from the periwinkle have turned that situation around completely. Today, over ____% of all kids with ALL survive and thrive. Doctors believe that someday everybody with the disease will be cured, thanks to a remarkable flower from the tropical rainforest.
- Now this liana is used to treat people with Parkinson's disease, _____ sclerosis, and muscular disorders.
- Quinine from the bark of cinchona tree is one of the oldest treatments for _____ and is still used today.
- Cinchona bark was first used for healing by the indigenous peoples of Peru. The tree is considered so important to the nation's history Peruvians call the cinchona their national tree. The bright red roots of the Wasai tree can keep our _____ healthy.
- Scientists believe we have only begun to uncover the secrets of the rainforest. Every year, new species of plants, animals, and insects are identified. Who knows how many _____ are still hidden?
- We need the rainforest now more than ever, yet it is _____. Every day, some 80,000 acres of rainforest are cleared.

Saving the Rainforest.

- Saving tropical rainforests is a big job. It will take a lot of effort from governments, organizations, and people all over the _____.
- One of the biggest problems in saving the rainforest is how to help the people who live in and near the forest.

- These people grow and harvest the products that we use every day
 - _____,
 - palm oil,
 - _____,
 - tropical _____, and
 - _____.

- Organizations like the Rainforest Federation are trying to help these farmers by connecting them to consumers who want their products but don't want to hurt the rainforest. Small farmers don't do as much _____ to the forest and will work to save their resources.

- The rainforest is home to indigenous people who have lived there for thousands of years. They know the rainforest and are _____ in its plants and animals.
- Rainforest Foundation and other international organizations work with these people to help them sell and trade the materials they _____.

- If you are in the grocery store, you might see products with stickers saying Fairtrade or Equal Exchange. This can be a clue that they come from people who are working to help save the _____, especially the rainforests.

- _____ also helps save the rainforests. That's something you may be doing already.
- Trees are used to make paper. _____ is one of the major industries destroying the rainforest. Using less paper and buying things made from _____ paper can save the rainforests.

- Buying products made of recycled _____ can help save the forest, too.

- Thousands of acres of rainforest have been cleared to provide pasture for _____.
- Big cattle ranches have driven many indigenous people from their traditional lands. If you and your family eat _____, you can try to make sure it comes from a _____ farm and has not been imported from tropical regions.
- If we all work together, we can do it before it's too _____.