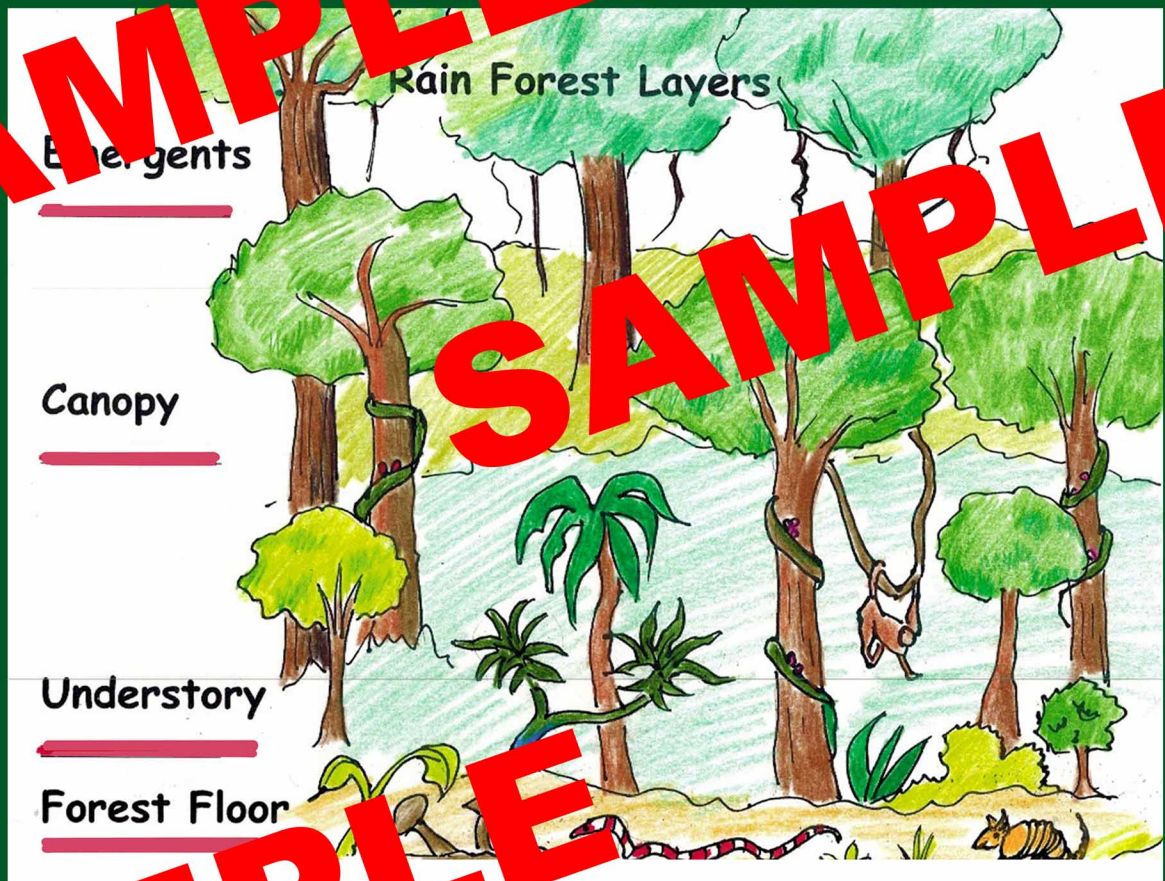


# Close Reading

Plus Writing Activities

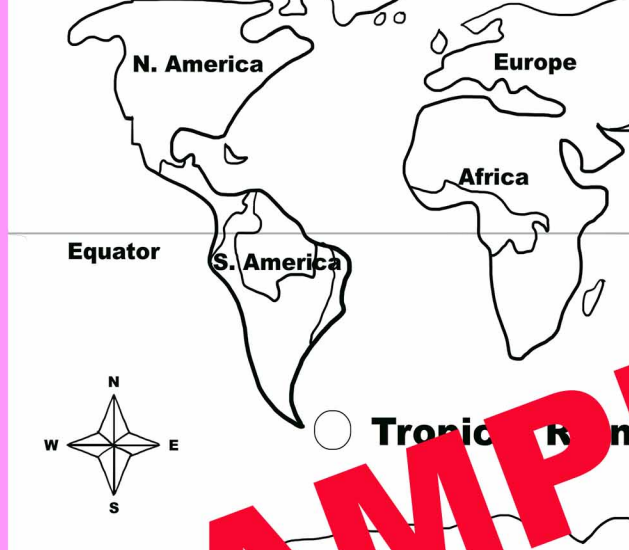
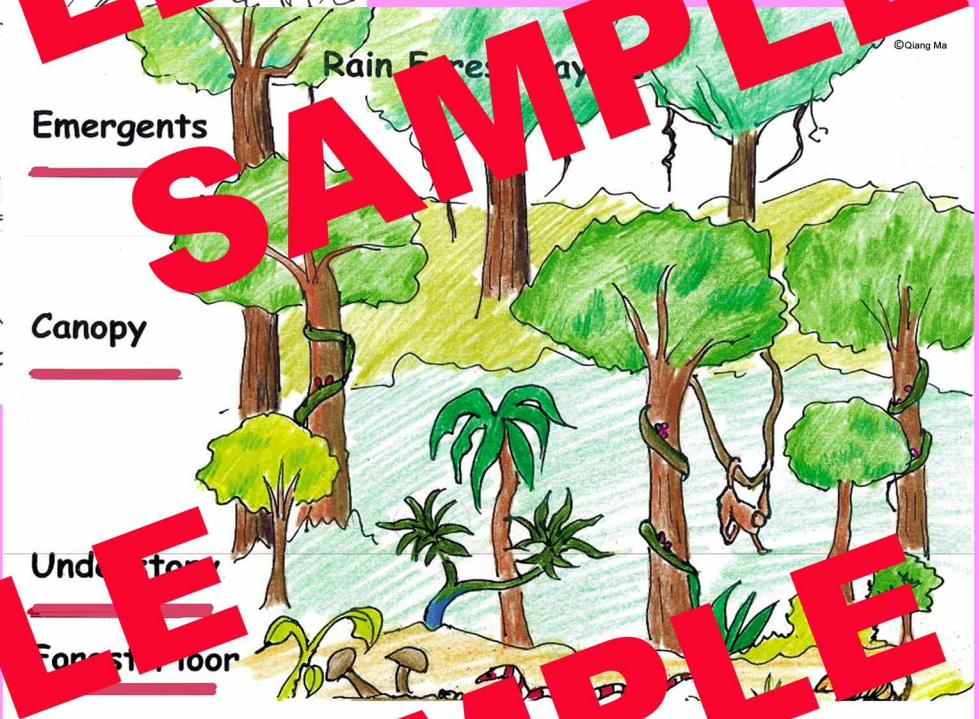
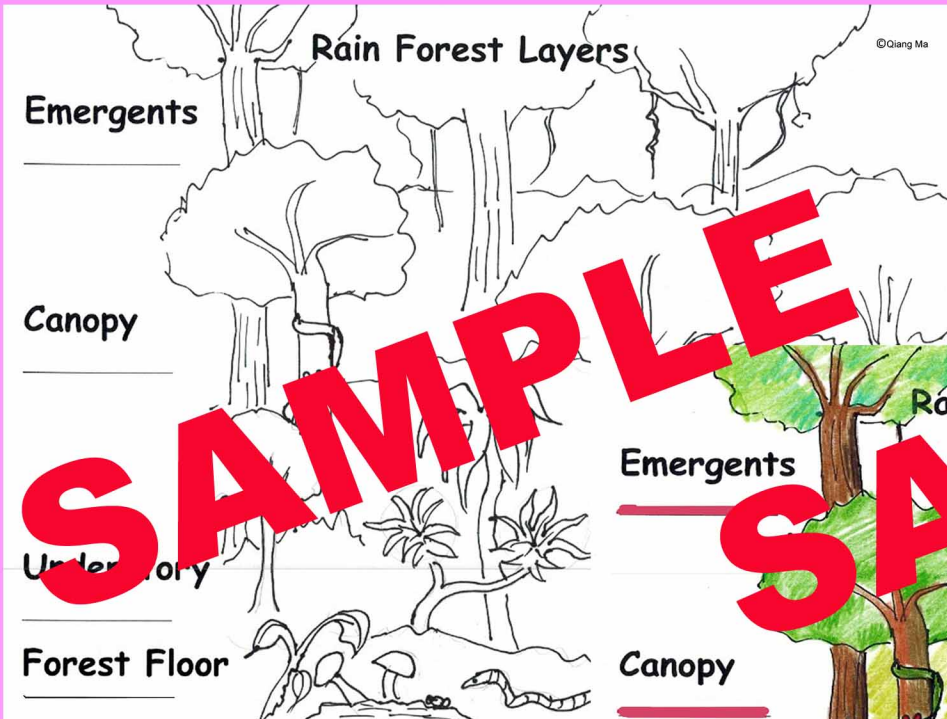
Nature's Green Umbrella By Gail Gibbons



Teaching Environmental Science through  
Reading, Comprehension, Vocabulary  
Posters, and Reflection

Qiang Ma







Header: Nature's Green Umbrella, Close Reading, Citing the Text

Title: \_\_\_\_\_

Things to remember

- Highlight the title in yellow.
- Underline topic sentence in green.
- Circle the important words in red.
- Use the coding symbols throughout text.

CLOSE reading symbols:

- Check Mark (✓) - understands story
- Star (\*) - something is important
- Exclamation mark (!) - something new, something that is surprising
- Question mark (?) - unsure, don't understand it

The main idea of these passages is to \_\_\_\_\_

What have you learned about rain forest? \_\_\_\_\_

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- Check Mark (✓) - understands story
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The main idea of these passages is to explain tropical rain forests.

What have you learned about rain forest? \_\_\_\_\_

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1. Introduction to Rain Forest

Most rain forests are found in warm, wet climates near the equator. These areas are called the tropics. When the sun shines, temperatures can reach 90 degrees Fahrenheit. They rarely fall below 70 degrees. Many tropical rain forests stay green year-round.

Rain forests help create their own wet climates. They are thick with plant life. These plants and trees soak up rainwater from the soil and return it to the air through transpiration. About half the transpired water falls back down on the forest as rain—lots of rain! It rains more than 200 days a year in most rain forests. Sometimes as much as 240 inches of rain fall each year.

Scientists believe some tropical rain forests have existed for 100 million years. Today they cover about 7 percent of the earth's land surface. Pushed together, they would be just about the size of the United States. Living in them are at least half of the earth's species, or kinds, of plants and animals. Scientists are constantly discovering more. A single acre of rain forest, about the size of two football fields, may have over 300 different kinds of trees. In the United States or in Europe, a similar area of forest may have only 12 kinds. The earth's biggest rain forest is the Amazon forest in South America. It is home to more than 1600 species of birds and about a million different kinds of insects.

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1. Text Dependent Questions

Where are most rain forests found?

How do rain forests help create their own wet climates?

For how long have rain forests existed?

Explain Amazon forest.

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1. Text Dependent Questions

Where are most rain forests found?

How do rain forests help create their own wet climates?

For how long have rain forests existed?

Describe the Amazon forest.

Header: Nature's Green Umbrella, Close Reading, Citing the Text

3. Layers

The canopy is the top layer of the forest. It is made up of different kinds of trees and plants. The trees are tall and thin. They are called emergent trees. The trees in the canopy are shorter. They are called emergent trees. The trees in the understory are even shorter. They are called emergent trees. The trees in the forest floor are the shortest. They are called emergent trees.

The understory is the layer of the forest below the canopy. It is made up of different kinds of trees and plants. The trees are tall and thin. They are called emergent trees. The trees in the canopy are shorter. They are called emergent trees. The trees in the understory are even shorter. They are called emergent trees. The trees in the forest floor are the shortest. They are called emergent trees.

The forest floor is the bottom layer of the forest. It is made up of different kinds of trees and plants. The trees are tall and thin. They are called emergent trees. The trees in the canopy are shorter. They are called emergent trees. The trees in the understory are even shorter. They are called emergent trees. The trees in the forest floor are the shortest. They are called emergent trees.

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2. Rain Forest Ecosystem

The rain forest, with its millions of plant and animal species, makes up a complex ecosystem. This ecosystem comes partly from a French word meaning "house" or "place." It refers to the house of the forest floor. All parts of the ecosystem work together to make sure that the rain forest thrives.

The life of all rain forest ecosystems begins with the air, water, and soil. These three sources combine to create a substance that uses energy from the sun to turn these materials into food. During this process, carbon dioxide is released into the air.

Plants provide food for the insects and other animals that live in the rain forest ecosystem. In turn, these animals become food for the forest floor. This is a natural part of the cycle of the forest. When dead leaves, the stems of dead plants and animals become nutrients that go back up the soil and provide food for the plants and trees. The cycle of life continues.

Tropical rain forests are more than beautiful ecosystems. They are home to a vast number of species. We've seen that some of the water, carbon dioxide, and oxygen that the rain forest produces are used by the rain forest to stay cool, clear parts of the earth.

Tropical rain forests also help keep a healthy balance of gases in the air. Carbon dioxide is absorbed by the millions of trees and other plants. They in turn give off vast amounts of oxygen for people and other animals to breathe.

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2. Text Dependent Questions

What is a rain forest ecosystem?

How does photosynthesis work?

What is the life cycle of the rain forest?

Why are rain forests important to the world?

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3. Layers of Rain Forest

In each layer, the plants and animals are specially adapted to live in that layer. The canopy is the top layer of the forest. It is made up of different kinds of trees and plants. The trees are tall and thin. They are called emergent trees. The trees in the canopy are shorter. They are called emergent trees. The trees in the understory are even shorter. They are called emergent trees. The trees in the forest floor are the shortest. They are called emergent trees.

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3. Text Dependent Questions

Explain the emergent layer.

Explain the canopy layer.

Explain the understory layer.

Explain the forest floor layer.

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4. Rain Forest Protection

Today many rain forests are quickly disappearing at a rate of about 50 million acres each year worldwide. Trees are being harvested for their valuable wood. Even more are being cut down and burned to clear the land for roads, farming, and grazing. This practice is called slash-and-burn.

As forests are destroyed, some people believe the earth's climate is changing. There is already a lot of carbon dioxide in the air. The burning of the rain forests releases even more. All this carbon dioxide hangs in the atmosphere with other gases that are created in similar ways. With fewer trees to take in carbon dioxide and trap water back into the air, the earth's warmth could be trapped inside a growing layer of these gases. The world's climate could become warmer. This is called the "greenhouse effect."

Meanwhile, another threat to rain forest areas is from flooding. Without the protection of rain forest plants, soil is washed away by rain and wind. A valley is washed to left behind. Without vegetation to slow the rain down, it rushes into streams and rivers, causing them to rise and flood vast areas. As the rain forests disappear, so do countless species of plants and animals.

Many people are working hard to save the tropical rain forests from destruction. They hope to protect the people who live there, too. One way is to create protected places called reserves. In some reserves only selective cutting is allowed. This means that loggers and farmers can cut down certain trees, but others must be left to grow. Some people think selective reserves will also help. In these reserves, people are allowed to take only limited amounts of fruit, plants, nuts, latex for the production of rubber, and other natural products.

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4. Text Dependent Questions

How quickly are the rain forests disappearing?

Why are rain forests disappearing today?

What are the threats caused by the destruction of rain forests?

What have people been doing to protect rain forests from destruction?

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Vocabulary

transpiration: the process where plants absorb water through their roots and then give off water vapor through their leaves

species: a group of living organisms that can breed and produce offspring

ecosystem: a community of living organisms and their physical environment

canopy: the upper layer of a forest, made up of the crowns of trees

photosynthesis: the process by which green plants use sunlight to produce food and oxygen

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1. It is suggested that the following items may be added:

Item	Teacher	Student
The Rain Forest Green Umbrella by Gail Gibbons	V	
Information	V	
Vocab Poster	V	
	* Teacher can blow the original black and white sample into a poster.	
Info Organizer	V	V
Blank Paper for Drawing on Day 1	V	V
4 Reading Passages	V	V
4 Text Dependent Questions Sets	V	V
Vocabulary	V	V
1 Rain Forest Map Black Line Drawing Set	V	
1 Rain Forest Layers Black Line Drawing Set		
1 Rain Forest Map Color Drawing Set	*	*
1 Rain Forest Layers Color Drawing Set	Teacher can blow the original black and white sample into a poster and color it.	Students may create the poster in groups by using teacher's sample.
Teacher Prepared Pack	*	
1 Rain Forest Map Color Drawing with labels	I tried to try to make it as possible as possible. I really like it. I am going to use it to model for your students.	
1 Rain Forest Layers Color Drawing with labels		
<ul style="list-style-type: none"> <li>1 Vocab Poster with Post-it notes</li> <li>1 Info Organizer completed</li> <li>4 Reading Passages with marks</li> <li>4 Text Dependent Questions Sets with answers</li> <li>Vocab Sheet with answers</li> <li>2 Student Individual Sample Writings</li> </ul>		
Sharpie	V	V
Crayon/Markers	V	V
Post-It	*	

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V: must, \*: optional

2. Read the lesson plan.
3. Look at the finished sample works included.
4. Photocopy 12 page package (2 Empty Lesson Info Organizer, 4 Reading Passages, 4 Text Dependent Questions Sets, and 1 Vocabulary Sheet) for students. Make an extra set for the teacher to use.
5. The lesson designed to cross curriculum among ELA, Science/Environment, and Social Studies using those reading and GLAD strategies.

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# Credits

I draw all the clipart myself for all the products in my store.

Thank you so much and I hope you enjoy this lesson.

