New York State Common Core

English Language Arts Curriculum

GRADE 5  Module 2A
Unit 2
Student Workbook
Meg Lowman Interview Questions and Answers

A. Why spend time in trees?
Almost 50 percent of life on earth is estimated to live in tree canopies, yet this was an unexplored region until about 25 years ago. Much of my work has involved solving the challenge of just getting into the treetops: inventing gadgets, refining hot air balloon design, creating canopy walkways, working from cherry pickers and construction cranes. Once up there, I discovered that insects eat four times more leaf material than we imagined.

B. Is that important?
Lots of things stress forests. And with forests becoming warmer, drier, and more fragmented, insect outbreaks are predictably one of the first responses to climate change.

C. What was your first science project/experience as a child?
In fifth grade, I won second prize in the N.Y. State science fair, surrounded by boys. I was so shy that I did not even dare speak, due to the gender disparity, but it also made me determined to pursue what I loved.

D. What fascinates you the most about canopy ecology?
The amazing “eureka” element. Until recently, when a few of us climbed into the canopy, no human being knew that half of the biodiversity on our terrestrial earth lived in the treetops. For centuries, foresters had assessed forests by looking at the very bottom of the tree. It is almost as if we had been trying to gauge the health of people by just looking at someone’s big toe but ignoring the rest. It is also humbling to realize that a kid can come from a small, underserved town (as I did) and make a cool discovery in science, because there is so much left that remains unknown.

Source:
Questions 1 and 2: “Interview: Margaret Lowman” by Marian Smith Holmes. Smithsonian (December, 2006).
### Meg Lowman, Rainforest Scientist KWL Anchor Chart

<table>
<thead>
<tr>
<th>KNOW</th>
<th>WANT</th>
<th>LEARNED</th>
</tr>
</thead>
<tbody>
<tr>
<td>K</td>
<td>W</td>
<td>L</td>
</tr>
</tbody>
</table>
Listening Criteria Rubric

I focused my attention on what the speaker/reader was saying.

I listened for main ideas.

I took notes about important ideas and details.

I waited until after the speaker was finished before asking questions or making comments.
<table>
<thead>
<tr>
<th>Main Ideas (paraphrase or list)</th>
<th>Supporting Details for the Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>What does Meg Lowman study in the rainforests?</td>
<td></td>
</tr>
<tr>
<td>What were Meg Lowman’s interests as a child?</td>
<td></td>
</tr>
</tbody>
</table>
**Process for Pressing Specimens Note-catcher**

**Group Member Names:**

**Date:**

<table>
<thead>
<tr>
<th>Step (one or two words to name the step)</th>
<th>Description of Step (define or describe the step using details in the text)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
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<tr>
<td>Word</td>
<td>Definition</td>
</tr>
<tr>
<td>-----------------</td>
<td>----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>orchid</td>
<td>a flowering plant; some types grow on other plants</td>
</tr>
<tr>
<td>bromeliad</td>
<td>a tropical plant with fleshy leaves; often grow on other plants</td>
</tr>
<tr>
<td>blossoms</td>
<td>flowering part of a plant</td>
</tr>
<tr>
<td>preserve</td>
<td>treat or store something to protect it; keep it from breaking apart</td>
</tr>
<tr>
<td>solution</td>
<td>two or more substances mixed together; used to preserve a specimen</td>
</tr>
<tr>
<td>three-dimensional form</td>
<td>an object that has height, width, and volume</td>
</tr>
<tr>
<td>acid-free</td>
<td>paper that doesn’t use acid; helps specimens last longer</td>
</tr>
<tr>
<td>herbarium</td>
<td>a plant library</td>
</tr>
<tr>
<td>pluck</td>
<td>remove; pull; pick at; grasp</td>
</tr>
<tr>
<td>sailed</td>
<td>glided; floated; moved smoothly</td>
</tr>
<tr>
<td>aloft</td>
<td>high above; in the air; up</td>
</tr>
<tr>
<td>ascent</td>
<td>climb; move upward</td>
</tr>
<tr>
<td>trapeze</td>
<td>a bar attached to the ends of two ropes</td>
</tr>
<tr>
<td>foliage</td>
<td>plant life</td>
</tr>
<tr>
<td>inflatable</td>
<td>able to be filled with air</td>
</tr>
<tr>
<td>marvelous</td>
<td>amazing; spectacular; wonderful</td>
</tr>
<tr>
<td>sorts</td>
<td>places into categories; arranges; classifies</td>
</tr>
<tr>
<td>specimens</td>
<td>examples; samples; a type of something</td>
</tr>
<tr>
<td>collection</td>
<td>a set of objects; a group of things</td>
</tr>
<tr>
<td>permit</td>
<td>a license allowing something; giving permission</td>
</tr>
</tbody>
</table>
### Close Reading Note-catcher

#### Immerse Yourself! First Read Note-catcher

<table>
<thead>
<tr>
<th>Words or phrases that stand out or seem important</th>
<th>Based on the words and phrases... My initial thoughts about the meaning of this section of the text</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

#### Dive Deeper Second Read Note-catcher

**Learning Targets:**
- I can explain why the canopy is a difficult place to research.
- I can identify the skills needed by scientists in order to study the rainforest canopy.

**Strategy Focus:** I can use visual features to contribute to my understanding of the text.

<table>
<thead>
<tr>
<th>Evidence from the text</th>
<th>My thinking</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Map of North and South America

1. The text says that in Blue Creek there “are more *varieties* of living things than perhaps any other place on earth.” What does the word *varieties* mean in this text? What details from the first paragraph on page 12 support this statement?

2. According to the second paragraph, what types of animals live in the Blue Creek rainforest? Support your answer with evidence from the text.

3. The third paragraph describes how “When a tree falls … new creatures move in and take over the *altered habitats*.” What does the phrase *altered habitats* mean in this sentence? Support your answer with evidence from the text.
**Directions:**
1. Read pages 13-16.
2. Complete the Note-catcher below.

### Immerse Yourself!

**First Read**

| Words or phrases that stand out or seem important | Based on the words and phrases...
| My initial thoughts about the meaning of this section of the text |
| --- | --- |
|  |  |
## TASK CARD: Chunk #1

**READ** p. 13, paragraphs 1 and 2  
Start with the phrase, “Meg Lowman believes ...” and read through “How many species can be removed ...”

**KEY VOCABULARY, p. 13**  
- functions (academic)  
- impact (academic)  
- recently (academic)  
- invincible (academic)  
- track (academic)  
- previous (academic)

## TASK CARD: Chunk #2

**READ** p. 13, paragraph 3  
Start with the phrase, “Viewed from an airplane ...” and read through “At Blue Creek a canopy walkway ...”

**KEY VOCABULARY, p. 13**  
- viewed (academic)  
- emergent growth (scientific)  
- crowns (scientific)  
- pavilion (scientific)  
- floor (scientific)  
- walkway (academic)

## TASK CARD: Chunk #3

**READ** p. 14, paragraph 1  
Start with the phrase “Meg is up at first light” and read through “To descend, the climber must ...”

**KEY VOCABULARY, p. 14**  
- gear (academic)  
- Mayan (scientific)  
- vary (academic)  
- Jumars (scientific)  
- ascenders (scientific)  
- descend (academic)  
- manually (academic)
### TASK CARD: Chunk #4

**READ** p. 14, last two sentences and p. 15, paragraph 1  
Start with the phrase “Bye Mom” and read through “In the meantime, they can swim.”

**KEY VOCABULARY**, pp. 14–15  
- *base* (scientific)  
- *accompanied* (academic)  
- *tag* (academic)  
- *explore* (academic)

### TASK CARD: Chunk #5

**READ** p. 15, paragraph 2  
Start with the phrase “Meg is fast” and read through “Now she is at the beginning of the walkway.”

**KEY VOCABULARY**, p. 15  
- *Ormosia* (scientific)  
- *fixed* (academic)  
- *project* (academic)  
- *unpracticed* (academic)  
- *securely* (academic)  
- *mosaic* (academic)  
- *negotiating* (academic)

### TASK CARD: Chunk #6

**READ** p. 15, last sentence and continue to p. 16, first paragraph  
Start with the phrase “The walkway itself ...” and read through “There is a major observation platform.”

**KEY VOCABULARY**, pp. 15–16  
- *spans* (academic)  
- *bank* (scientific)  
- *diverge* (academic)  
- *observation platform* (scientific)  
- *junction* (academic)  
- *provide* (academic)
### TASK CARD: Chunk #7

**READ** p. 16, paragraph 2
Start with the phrase “When viewed from below...” and read through “For those creatures that swing or glide or climb...”

**KEY VOCABULARY**, pp. 16
- *maze* (academic)
- *tangled* (academic)
- *horizontally* (academic)
- *influences* (academic)
- *lianas* (scientific)
- *commuting* (academic)
Expert Groups Gist Note-catcher

<table>
<thead>
<tr>
<th>Chunk of Text</th>
<th>GIST What is the main idea of what you read?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<td>2</td>
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<td>3</td>
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<td>5</td>
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<td>6</td>
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<td>7</td>
<td></td>
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<tr>
<td>PROCESS/STEP</td>
<td>PURPOSE</td>
</tr>
<tr>
<td>--------------</td>
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</tr>
<tr>
<td>(Short phrases that name the step)</td>
<td>(Why does Meg do this step?)</td>
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</table>

Group Member Names: 
Date:
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tbody>
<tr>
<td>surface</td>
<td>outside; face</td>
</tr>
<tr>
<td>acquires</td>
<td>gets; gains; obtains</td>
</tr>
<tr>
<td>notations</td>
<td>notes about ideas and important information</td>
</tr>
<tr>
<td>populations</td>
<td>inhabitants; groups of living things in an area</td>
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<tr>
<td>synchronized</td>
<td>made things work at the same time; coordinated</td>
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<tr>
<td>theory</td>
<td>idea or belief about something based on knowledge, experience</td>
</tr>
<tr>
<td>ongoing processes</td>
<td>constant/unending experiments and/or steps in an experiment</td>
</tr>
<tr>
<td>exclusion</td>
<td>something left out</td>
</tr>
<tr>
<td>variable</td>
<td>something that can change and/or be changed</td>
</tr>
<tr>
<td>control</td>
<td>a standard or unchanging part of an experiment that results are compared to</td>
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<tr>
<td>barrier</td>
<td>obstacle that blocks access to something</td>
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<tr>
<td>consume</td>
<td>eat; chomp through</td>
</tr>
<tr>
<td>stimulate</td>
<td>increase; speed up</td>
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<td>increase; speed up</td>
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</tbody>
</table>
Mid-Unit 2 Assessment: *The Most Beautiful Roof in the World Quiz*

**Name:**

**Date:**

**Instructions:**

Read pages 22–23 of *The Most Beautiful Roof in the World*. Consider the gist of these pages—what they are mostly about. Skim the assessment questions below.

Reread the pages, thinking about the assessment questions. Answer the questions in complete sentences. Be sure to cite evidence from the text to support your answers.

1. Circle the letter next to the name of the tree or plant that is not found in the area Meg Lowman is studying.
   
   A. lianas  
   B. Nargusta tree  
   C. Christmas cactus  
   D. bromeliads  
   E. Kapok tree

2. In the sentence, “From this platform she has a good view of four ant gardens she is monitoring,” what does the word *monitoring* mean? Support your answer with evidence from the text.

3. Fill in the blank: Epiphytes are ___________ vines and lianas because they usually start growing from the canopy down.
4. The text tells us that epiphytes root on the bark or soil found on a tree. Number each step (1–6) to show the order of epiphyte growth.

   ____ Seeds sprout
   ____ Plants deposit sugars.
   ____ The plant takes root.
   ____ A bird excretes a seed from overhead, or ants drag in bits of plant material.
   ____ Ants feed off the glucose proteins of the plants’ succaries.
   ____ Ant farmers tend the sprouts.

5. The author states: “Scientists think that the ant gardens themselves may be of benefit to more than just the ants.” What does the word benefit mean in this sentence? In what way(s) do the ant gardens benefit more than just the ants? Quote the text in your answer.
Tracking My Progress, Mid-Unit 2

Name:  
Date:  

Learning Target: I can determine the meaning of new words from context in *The Most Beautiful Roof in the World*.

1. The target in my own words is:

________________________________________________________________________________________________________
________________________________________________________________________________________________________
________________________________________________________________________________________________________

2. How am I doing? Circle one.

[ ] I need more help to learn this  [ ] I understand some of this  [ ] I am on my way!

3. The evidence to support my self-assessment is:

________________________________________________________________________________________________________
________________________________________________________________________________________________________
________________________________________________________________________________________________________
________________________________________________________________________________________________________
Learning Target: I can determine the main ideas of a selection of text from *The Most Beautiful Roof in the World*.

1. The target in my own words is:

2. How am I doing? Circle one.

   - I need more help to learn this
   - I understand some of this
   - I am on my way!

3. The evidence to support my self-assessment is:

   -
   -
   -
   -
   -
Tracking My Progress, Mid-Unit 2

Learning Target: I can justify my answers using quotes and evidence from the text.

1. The target in my own words is:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

2. How am I doing? Circle one.

I need more help to learn this    I understand some of this    I am on my way!

3. The evidence to support my self-assessment is:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
<table>
<thead>
<tr>
<th></th>
<th>Hot Seat Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>What is biodiversity?</td>
</tr>
<tr>
<td>2</td>
<td>Give an example of biodiversity.</td>
</tr>
<tr>
<td>3</td>
<td>What is the highest level of growth in the rainforest called?</td>
</tr>
<tr>
<td>4</td>
<td>What are bromeliads?</td>
</tr>
<tr>
<td>5</td>
<td>What layer of growth is just above the canopy?</td>
</tr>
<tr>
<td>6</td>
<td>ACT IT OUT!</td>
</tr>
<tr>
<td></td>
<td>ascend</td>
</tr>
<tr>
<td>7</td>
<td>ACT IT OUT!</td>
</tr>
<tr>
<td></td>
<td>descend</td>
</tr>
<tr>
<td>8</td>
<td>What is a conservationist?</td>
</tr>
<tr>
<td>9</td>
<td>What country is the Blue Creek rainforest in?</td>
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<td></td>
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<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td><strong>10</strong></td>
<td>Give an example of biodiversity.</td>
</tr>
<tr>
<td><strong>11</strong></td>
<td>DRAW IT!</td>
</tr>
<tr>
<td><strong>12</strong></td>
<td>DRAW IT!</td>
</tr>
<tr>
<td><strong>13</strong></td>
<td>DRAW IT!</td>
</tr>
<tr>
<td><strong>14</strong></td>
<td>DRAW IT!</td>
</tr>
<tr>
<td><strong>15</strong></td>
<td>DRAW IT!</td>
</tr>
<tr>
<td><strong>16</strong></td>
<td>ACT IT OUT!</td>
</tr>
<tr>
<td><strong>17</strong></td>
<td>ACT IT OUT!</td>
</tr>
<tr>
<td><strong>18</strong></td>
<td>Give an example of biodiversity.</td>
</tr>
</tbody>
</table>

Macaws “*foraging* for food to bring to their young.”
<table>
<thead>
<tr>
<th>Rainforest Creature</th>
<th>Creature Relationship to Bromeliad</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Inner levels</strong></td>
<td></td>
</tr>
<tr>
<td>of bromeliads</td>
<td></td>
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<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Overlapping</strong></td>
<td></td>
</tr>
<tr>
<td>leaves of</td>
<td></td>
</tr>
<tr>
<td>bromeliads</td>
<td></td>
</tr>
</tbody>
</table>
The mind sees this forest better than the eye. The mind is not deceived by what merely shows.
—H.M. Tomlinson

On the banks of the Amazon River, in a clearing in the forest, there once lived a girl named Chimidyue. She dwelt with her family and relatives in a big pavilion-house called a maloca.

While the boys of the maloca fished and hunted with the men, Chimidyue and the other girls helped the women with household chores or in the farm plots nearby. Like the other girls, Chimidyue never stepped far into the forest. She knew how full it was of fierce animals and harmful spirits, and how easy it was to get lost in.

Still, she would listen wide-eyed when the elders told stories about that other world. And sometimes she would go just a little way in, gazing among the giant trees and wondering what she might find farther on.

One day as Chimidyue was making a basket, she looked up and saw a big morpho butterfly hovering right before her. Sunlight danced on its shimmering blue wings.

“You are the most magical creature in the world,” Chimidyue said dreamily. “I wish I could be like you.”

The butterfly dipped as if in answer, then flew toward the edge of the clearing.

Chimidyue set down her basket and started after it, imitating its lazy flight. Among the trees she followed, swooping and circling and flapping her arms.

She played like this for a long time, until the butterfly passed between some vines and disappeared. Suddenly Chimidyue realized she had gone too far into the forest. There was no path, and the leaves of the tall trees made a canopy that hid the sun. She could not tell which way she had come.

“Mother! Father! Anyone!” she shouted. But no one came.

“Oh no,” she said softly. “How will I find my way back?”

Chimidyue wandered anxiously about, hoping to find a path. After a while she heard a tap-tap-tapping. “Someone must be working in the forest,” she said hopefully, and she followed the sound. But when she got close, she saw it was just a woodpecker.

Chimidyue sadly shook her head. “If only you were human,” she said, “you could show me the way home.”

“Why would I have to be human?” asked the woodpecker indignantly. “I could show you just as I am!”

Startled but glad to hear it talk, Chimidyue said eagerly, “Oh, would you?”

“Can’t you see I’m busy?” said the woodpecker. “You humans are so conceited, you think everyone else is here to serve you. But in the forest, a woodpecker is just as important as a human.” And it flew off.
“The Wings of the Butterfly: A Tale of the Amazon Rainforest” (short story)
By Aaron Shepard

“I didn’t mean anything bad,” said Chimidyue to herself. “I just want to go home.”
More uneasy than ever, Chimidyue walked farther. All at once she came upon a maloca, and sitting within it was a woman weaving a hammock.
“Ah, grandmother!” cried Chimidyue joyfully, addressing the woman with the term proper for an elder. “I’m so glad to find someone here. I was afraid I would die in the forest!”
But just as she stepped into the maloca, the roof began to flap, and the maloca and the woman together rose into the air. Then Chimidyue saw it was really a tinamou bird that had taken a magical form. It flew to a branch above.
“Don’t you ‘grandmother’ me!” screeched the bird. “How many of my people have your relatives hunted and killed? How many have you cooked and eaten? Don’t you dare ask for my help.” And it too flew away.
“The animals here all seem to hate me,” said Chimidyue sorrowfully. “But I can’t help being a human!”
Chimidyue wandered on, feeling more and more hopeless, and hungry now as well. Suddenly, a sorva fruit dropped to the ground. She picked it up and ate it greedily. Then another dropped nearby.
Chimidyue looked up and saw why. A band of spider monkeys was feeding in the forest canopy high above, and now and then a fruit would slip from their hands.
“I’ll just follow the monkeys,” Chimidyue told herself. “Then at least I won’t starve.” And for the rest of that day she walked along beneath them, eating any fruit they dropped. But her fears grew fresh as daylight faded and night came to the forest.
In the deepening darkness, Chimidyue saw the monkeys start to climb down, and she hid herself to watch. To her amazement, as the monkeys reached the ground, each one changed to the form of a human.
Chimidyue could not help but gasp, and within a moment the monkey people had surrounded her.
“Why, it’s Chimidyue!” said a monkey man with a friendly voice. “What are you doing here?” Chimidyue stammered, “I followed a butterfly into the forest, and I can’t find my way home.”
“You poor girl!” said a monkey woman. “Don’t worry. We’ll bring you there tomorrow.”
“Oh, thank you!” cried Chimidyue. “But where will I stay tonight?”
“Why don’t you come with us to the festival?” asked the monkey man. “We’ve been invited by the Lord of Monkeys.”
They soon arrived at a big maloca. When the Monkey Lord saw Chimidyue, he demanded, “Human, why have you come uninvited?”
“We found her and brought her along,” the monkey woman told him.
The Monkey Lord grunted and said nothing more. But he eyed the girl in a way that made her shiver.

Many more monkey people had arrived, all in human form. Some wore animal costumes of bark cloth with wooden masks. Others had designs painted on their faces with black genipa dye. Everyone drank from gourds full of manioc beer.

Then some of the monkey people rose to begin the dance. With the Monkey Lord at their head, they marched in torchlight around the inside of the maloca, beating drums and shaking rattle sticks. Others sang softly or played bone flutes.

Chimidyue watched it all in wonder. She told her friend the monkey woman, “This is just like the festivals of my own people!”

Late that night, when all had retired to their hammocks, Chimidyue was kept awake by the snoring of the Monkey Lord. After a while, something about it caught her ear. “That’s strange,” she told herself. “It sounds almost like words.”

The girl listened carefully and heard, “I will devour Chimidyue. I will devour Chimidyue.”

“Grandfather!” she cried in terror.

“What? Who’s that?” said the Monkey Lord, starting from his sleep.

“It’s Chimidyue,” said the girl. “You said in your sleep you would devour me!”

“How could I say that?” he demanded. “Monkeys don’t eat people. No, that was just foolish talk of this mouth of mine. Pay no attention!” He took a long swig of manioc beer and went back to sleep.

Soon the girl heard again, “I will devour Chimidyue. I will devour Chimidyue.” But this time the snores were more like growls. Chimidyue looked over at the Monkey Lord’s hammock. To her horror, she saw not a human form but a powerful animal with black spots.

The Lord of Monkeys was not a monkey at all. He was a jaguar!

Chimidyue’s heart beat wildly. As quietly as she could, she slipped from her hammock and grabbed a torch. Then she ran headlong through the night.

When Chimidyue stopped at last to rest, daylight had begun to filter through the forest canopy. She sat down among the root buttresses of a kapok tree and began to cry.

“I hate this forest!” she said fiercely. “Nothing here makes any sense!”

“Are you sure?” asked a tiny voice.

Quickly wiping her eyes, Chimidyue looked up. On a branch of the kapok was a morpho butterfly, the largest she had ever seen. It waved at her with brilliant blue wings.

“Oh, grandmother,” said Chimidyue, “nothing here is what it seems. Everything changes into something else!”

“Dear Chimidyue,” said the butterfly gently, “that is the way of the forest. Among your own people, things change slowly and are mostly what they seem. But your human world is a tiny one. All around it lies a much larger world, and you can’t expect it to behave the same.
“But if I can’t understand the forest,” cried Chimidyue, “how will I ever get home?”
“I will lead you there myself,” said the butterfly.
“Oh, grandmother, will you?” said Chimidyue.
“Certainly,” said the butterfly. “Just follow me.”
It wasn’t long till they came to the banks of the Amazon. Then Chimidyue saw with astonishment that the boat landing of her people was on the other side.

“I crossed the river without knowing it!” she cried. “But that’s impossible!”
“Impossible?” said the butterfly.
“I mean,” said Chimidyue carefully, “I don’t understand how it happened. But now, how will I get back across?”
“That’s simple,” said the morpho. “I’ll change you to a butterfly.” And it began to chant over and over,
Wings of blue, drinks the dew.
Wings of blue, drinks the dew.
Wings of blue, drinks the dew.

Chimidyue felt herself grow smaller, while her arms grew wide and thin. Soon she was flapping and hovering beside the other.
“I’m a butterfly!” she cried.
They started across the wide water, their wings glistening in the sun. “I feel so light and graceful,” said Chimidyue. “I wish this would never end.”
Before long they reached the landing, where a path to the maloca led into the forest. The instant Chimidyue touched the ground, she was changed back to human form.
“I will leave you here,” said the butterfly. “Farewell, Chimidyue.”
“Oh, grandmother,” cried the girl, “take me with you. I want to be a butterfly forever!”
“That would not be right,” said the butterfly. “You belong with your people, who love you and care for you. But never mind, Chimidyue. Now that you have been one of us, you will always have something of the forest within you.”
The girl waved as the butterfly flew off. “Good-bye, grandmother!”
Then Chimidyue turned home, with a heart that had wings of a butterfly.
Double Bubble Map (for Comparing Similarities and Contrasting Differences)

Name: 

Date: 

The Most Beautiful Roof in the World

“The Wings of the Butterfly”
Visualize how Meg Lowman starts at the tops of trees, in the understory, and works her way down the column to the air just above the forest floor. What does she see?

<table>
<thead>
<tr>
<th>Part of Column</th>
<th>List the Species and Counts of the Inventory</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
I want to be a rainforest scientist. Descending the columns, from canopy to floor
Floating high above pavilion crowns
And sweeping through the air
Spying into the depths of foliage
To see what is there.

I want to be a rainforest scientist. Within the branches of the canopy
Dangling from coiled rafts’ ropes
Tracing the lace where lines entwine
To discover the connections
To this mysterious vine.

I want to be a rainforest scientist. Spying on looping spider monkeys,
As macaws flash brilliantly through the air
To forage in the nearby kapok tree.
As I stare in amazement
At the teeming life before me.
I want to be a rainforest scientist.
Digging deep into the earth,
Sifting through the shrubbery,
And capturing insects in my net
To study these strange inhabitants
I haven’t counted yet.

I want to be a rainforest scientist.
Peeking into the petals of orchids,
And fiery red bromeliad leaves
To see what lurks inside
And catch rare glimpses of the creatures
Who only want to hide!

I want to be a rainforest scientist.
Exploring the unknown
And balancing my curiosity
With what I know is best.
To help preserve the world I study
Will be my greatest test.
## Readers Theater Rubric

**Name:**

<table>
<thead>
<tr>
<th>Individual Scores</th>
<th>1 – Needs Improvement</th>
<th>2 - Fair</th>
<th>3 – Good</th>
<th>4 - Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Delivery</strong></td>
<td>Student had difficulty reading the script and consistently did not use expression, eye contact, or props appropriately</td>
<td>Student read the script but had little expression, few gestures, little eye contact, or did not use props appropriately</td>
<td>Student read the script with some expression, gestures, eye contact, and use of props</td>
<td>Student read the script with confidence and expression, made gestures and good eye contact, and used props to add to the performance</td>
</tr>
<tr>
<td><strong>Cooperation with group</strong></td>
<td>Student did not work cooperatively together with group and could not agree on what to do. Student did not share responsibilities or ideas and wasted time</td>
<td>Student worked cooperatively with group in some aspects of the project but sometimes could not agree on what to do and wasted time</td>
<td>Student worked cooperatively with group in most aspects of the project and shared most responsibilities and ideas</td>
<td>Student worked cooperatively with the group in all aspects of the project and shared all responsibilities and ideas well</td>
</tr>
</tbody>
</table>

**Group Members:**

<table>
<thead>
<tr>
<th>Group Scores</th>
<th>1 – Needs Improvement</th>
<th>2 - Fair</th>
<th>3 – Good</th>
<th>4 - Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>On-task Participation</strong></td>
<td>Low level of active participation from majority of group members</td>
<td>Moderate level of on-task work or few of the group members actively participating</td>
<td>Majority of group members on-task and actively participating</td>
<td>High level of active, on-task participation from all group members</td>
</tr>
</tbody>
</table>
## Researching in the Rainforest Three-Column Note-catcher
(Focus on pages 35-36 of *The Most Beautiful Roof in the World*)

<table>
<thead>
<tr>
<th>Country</th>
<th>Research Method</th>
<th>Text That Describes the Research Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cameroon</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Panama</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Belize</td>
<td></td>
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</tr>
</tbody>
</table>
1. According to the text, what is a dirigible? Support your answer with evidence from the text.

2. The author states, “As fun as this giant trampoline in the sky was, working from it was also grueling.” What does the word grueling mean in this sentence? Support your answer with evidence from the text.

3. On page 36, the author describes how when Meg Lowman stepped into a battalion of army ants, she screamed bloody murder. What does the expression screamed bloody murder mean? Why did Meg do this? Support your answer with evidence from the text.
Walkways

Staples
Floating Raft

Crane
**TASK CARD #1**

**READ** On page 12, read the last two sentences of paragraph 1 (starting with: “In this shadowed world ...”) and all of paragraph 2 (ending with “... high above the forest floor in the tanks of bromeliads”).

**QUOTES** Record quotes from the text that help to explain biodiversity.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

**REVIEW** Look back at the AQUA Biodiversity anchor chart for ideas about biodiversity.

**EXPLAIN** Write one sentence to explain what biodiversity is.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
**TASK CARD #2**

**READ** On page 12, read all of paragraph 3 (starting with the phrase “The rainforest is a timeless ...” and ending with “... a rush of opportunistic species to fill the gaps”).

**QUOTES** Record quotes from the text that help to explain biodiversity.

---

**REVIEW** Look back at the AQUA Biodiversity anchor chart for ideas about biodiversity.

**EXPLAIN** Write one sentence to explain what biodiversity is.
TASK CARD #3

**READ** On page 13, read all of paragraph 1 (starting with “Meg Lowman believes ...” and ending with “... how it will have an impact”).

**QUOTES** Record quotes from the text that help to explain biodiversity.

---

**REVIEW** Look back at the AQUA Biodiversity anchor chart for ideas about biodiversity.

**EXPLAIN** Write one sentence to explain what biodiversity is.
What Is Biodiversity? Task Cards (1–5)

TASK CARD #4

READ On page 13, read all of paragraph 2 (starting with “When Meg wants to have a close look ...” and ending with “How many species can be removed before it will break?”).

QUOTES Record quotes from the text that help to explain biodiversity.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

REVIEW Look back at the AQUA Biodiversity anchor chart for ideas about biodiversity.

EXPLAIN Write one sentence to explain what biodiversity is.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
TASK CARD #5

READ On page 30, read all of paragraph 2 (starting with “Continuing to count ...” and ending with “... and at the most thirty different species”).

QUOTES Record quotes from the text that help to explain biodiversity.

APPLICATION Look back at the AQUA Biodiversity anchor chart for ideas about biodiversity.

EXPLAIN Write one sentence to explain what biodiversity is.
How does Meg Lowman explore the rainforest canopy, and what does she learn about biodiversity? After reading and analyzing The Most Beautiful Roof in the World, about rainforest scientist Meg Lowman, write an essay in which you address the question and analyze Meg Lowman’s research of biodiversity in the rainforests, providing examples to clarify your analysis.

Criteria for Success and Self-Assessment:
• Write two high-Quality paragraphs that have:
  * A topic sentence
  * Correct punctuation
  * Correct grammar
  * Complete sentences that stay on topic
  * A concluding sentence
• Include one paragraph on each of the following:
  * How Meg Lowman conducts her research in the rainforest
  * What Meg Lowman learns about biodiversity
• Use academic and scientific vocabulary accurately.
Use this graphic organizer to help you plan one paragraph of your essay about Meg Lowman.

Paragraph Topic:

Detail:

Explain:

Detail:

Explain:
Learning Target: I can determine the meaning of new words in *The Most Beautiful Roof in the World*.

1. The target in my own words is:

   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________

2. How am I doing? Circle one.

   I need more help to learn this       I understand some of this       I am on my way!

3. The evidence to support my self-assessment is:

   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________
Tracking My Progress, End of Unit 2

Name: 
Date: 

Learning Target: I can determine the gist of a selection of text from *The Most Beautiful Roof in the World*.

1. The target in my own words is:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

2. How am I doing? Circle one.

I need more help to learn this  I understand some of this  I am on my way!

3. The evidence to support my self-assessment is:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

48
End of Unit Assessment:
On-Demand Analysis of Meg Lowman's Research in the Rainforest

Name:

Date:

Tracking My Progress, End of Unit 2

Learning Target: I can synthesize what I read in *The Most Beautiful Roof in the World*.

1. The target in my own words is:

2. How am I doing? Circle one.

   - I need more help to learn this.
   - I understand some of this.
   - I am on my way!

3. The evidence to support my self-assessment is:


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