Avery and Masa
Protectors of the Endangered Java Lava

Classroom Guide with STEAM Activities
Classroom Guide
with STEAM activities

AVERY and MASA
PROTECTORS OF THE ENDANGERED

JAVA LAVA

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Illustrations by
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Avery and Masa: Protectors of the Endangered®
To Our Amazing Teachers and Parents:

Thank you for introducing Avery and Masa! Avery is a Red Panda and Masa is a Slow Loris. Together, they serve as The Protectors of the Endangered. Avery and Masa is a first of its kind platform to activate endangered animals as heroes, rising together to protect the planet and create conservation awareness in our daily lives.

**Our mission is to educate and entertain children with movement driven content to help protect the endangered planet.**

Our world incorporates the social and purpose driven issues that these endangered animals face, including: conservation, diversity, bullying, safety, leadership, friendship and self-esteem.

We hope you enjoy reading Java Lava and the Classroom Guide with STEAM activities. Kids who grow up caring for nature seem to become more thoughtful and compassionate adults. In addition, our heroes of tomorrow are often cultivated within a wonderful classroom.

As educators ourselves, we know the magic you create every day. Your work truly applies to our message:

“One person can change the tide, but two friends can change the world.”

Sincerely,

Team Avery and Masa
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Suggestions on how to use this classroom guide:
• Chapter worksheets begin on page 6
• Extended lessons start on page 16 – These are guides that can be simplified or expanded
• Fun activities begin on page 26
• Use what works for your class! Pick and choose by ability and interest
• Give us feedback on how to better serve your students
**Story Summary**
The Protectors of the Endangered have arrived! Avery and Masa, our adorable heroes, meet in the belly of a cargo ship, captured by poachers and trapped in crates. Together, they must work to outsmart the infamous poacher Nukie Bluff and save the endangered animals of the world before it's too late.

**BOOK INFORMATION**
Grade Level Equivalent: 3–4 Ages: 7+
Readability: 4.2 Pages: 100
Genre: Fiction, Action/Adventure
Subject/Theme: Endangered Animals, Survival, Habitats

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<th>Reading</th>
<th>Writing</th>
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<td>RI.3.1, RI.3.2, RI.3.4, RI.3.5, RI.3.6</td>
<td>W.3.1, W.3.1.b, W.3.4-3.6</td>
<td>SL.3.1, SL.3.3, SL.3.4</td>
<td>NBT 3.2</td>
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**Before reading:** Discuss the following **guided questions** with your students:

1. What are your favorite animals? What makes them so unique?
2. How can one animal’s differences help them survive?
3. Why should we protect animals?
4. What would you name your favorite animal? What would your animal say to you if he/she could? What would he/she want to ask you?

**Now get ready for an adventure...**

Our story begins on an old wooden steamship, far, far from here. We need to be brave and we will have to work together. Bring a raincoat and some snacks and get ready...

**Hurry, Avery and Masa need your help!**
Chapter 1: The Sea Cow

Ch. 1 Vocabulary: Rivets, Surging, Cargo
Practice writing each word below and choose one adventure on page 23.

1. __________________________________________________________
2. __________________________________________________________
3. __________________________________________________________

Reading Comprehension

1. What is the **setting** of the story? *(Hint: where/when?)*

2. What is the name of the old steamship?

4. What orders did the captain give to the crew?

5. **Make a prediction:** What do you think could happen to the ship?

Math Check: **Solve the word problem**

The Sea Cow had 35 boxes of cargo. During the storm, Tiago has to throw some boxes overboard so the Sea Cow doesn't sink. If 16 boxes are marked as "precious", how many boxes are unnecessary and can be tossed overboard?
Chapter 2: Precious Cargo

Ch. 2 Vocabulary: Critter, Accompanied, Ferociously
Practice writing each word below and choose one adventure on page 23.

1. ___________________________
2. ___________________________
3. ___________________________

Reading Comprehension

1. What was written on the crates?

2. Describe the critter? (3 adjectives)

3. Describe the creature? (3 adjectives)

6. Make a prediction: Do you think they will become friends? Why or why not?

Social skills: How do we make new friends?

New Friends!!
Ask Questions
Say Hi!
Chapter 3: Cat and Mouse

Ch. 3 Vocabulary: Flickering, Scurried, Typhoon
Practice writing each word below and choose one adventure on page 23.

1. ____________________________
2. ____________________________
3. ____________________________

Reading Comprehension

4. Make an inference: What do you think are in the other crates?

2. Should they open the crates? Why or why not?

3. How do Avery and Masa escape Tiago?

4. Reading Detective: Why did the captain seem so scared?

Math Check: Solve the word problem

A teacher has some Avery stickers. She wants to give them to her students. She needs 24 stickers. When she counted the stickers, she saw that she needs 8 more to have enough for each student. How many stickers does she have?
Chapter 4: Lost at Sea

Ch. 4 Vocabulary: Nectar, Chaos, Horizon
Practice writing each word below and choose one adventure on page 23.

1. _______________________________________
2. _______________________________________
3. _______________________________________

Reading Comprehension

1. What is a typhoon?

2. What do you think “the eye of the storm” means?

3. What did Avery and Masa use to float in the ocean?

4. Make an inference: Why were Avery and Masa so excited at the end of the chapter?

Geography: Where are Avery and Masa?

Can you name 7 Continents?

1. Antarctica
2. ______________________
3. ______________________
4. ______________________
5. ______________________
6. ______________________
7. ______________________

Circle Avery and Masa on the map! Hint: Indian Ocean
Chapter 5: Legends and Fairy Tales

Ch. 5 Vocabulary: Forbidden, Inhabited, Eerie
Practice writing each word below and choose one adventure on page 23.

1.

2.

3.

Reading Comprehension

1. Where is Masa’s home?

2. How did Masa know they were on the forbidden island?

3. What guards the forbidden island?

4. Make a prediction: What do you think will happen next?

Masa Maze! Escape to safety!
Chapter 6: Island of Dragons

Ch. 6 Vocabulary: **Unison, Elegant, Sage**
Practice writing each word below and choose one adventure on page 23.

1. __________________________________________
2. __________________________________________
3. __________________________________________

**Reading Comprehension**

1. Describe the dragons? (3 adjectives)

2. How was Kamora different from the rest of the dragons?

3. What “purpose” did Kamora believe that Avery and Masa had?

4. **Make a prediction:** What do you think Sudan looks like?

**Reading Detective: Hints to define a word.**

A true reading detective always looks for context clues to understand a word you don’t know. Look for the context clues to try to understand the missing word.

“Sudan is the **sage** of the sea,” she replied. “He is almost a century old and is the wisest creature in the ocean.”

**What do you think is the meaning of “sage”?**

- A. Angry  
- B. Wise  
- C. Terrible  
- D. Sad

*Write a sentence using “sage”.*
Chapter 7: Surfing Sudan

Ch. 7 Vocabulary: Poaching, Sacrifice, Quest
Practice writing each word below and choose one adventure on page 23.

1. ________________________
2. ________________________
3. ________________________

Reading Comprehension

1. Describe the Sudan? (3 adjectives)

2. What does Sudan call the act of taking animals from their homes?

   Kamora: __________________________________________________
   Sudan: __________________________________________________

Life Science: Place the correct fact under the arrows.

1. Krill  2. 100 years  3. 100 Feet  4. Blue
### Reading Comprehension

1. Describe the island of Java? (using words from the story)

2. Who is Utari?

3. Why was the Loris village empty?

4. Make an inference: Why do you think Avery stopped running?

### Math Check: Solve the word problem

There are 45 volcanos on Java Island. Some of them are active and could blow at any second. _____ are not active and will not blow. How many volcanoes are active on Java?

Solve for each number: 11, 16, 21
Chapter 9: Java Lava

Ch. 9 Vocabulary: Incompetence, Disoriented, Toxic
Practice writing each word below and choose one adventure on page 23.

1. __________________________________________________________
2. __________________________________________________________
3. __________________________________________________________

Reading Comprehension

1. Describe Nukie Bluff? (3 Adjectives)

2. Why was Nukie upset?

3. What army did Avery bring against the humans?

4. Reading Detective: How did Masa escape the grasp of Nukie Bluff?

Characters: Can you name all the characters in the story?

Chapter 10: A New Quest

Ch. 10 Vocabulary: **Amigos, Gesture, Bravery**
Practice writing each word below and choose one adventure on page 23.

1. ______________________________________________________________________
2. ______________________________________________________________________
3. ______________________________________________________________________

**Reading Comprehension**

1. Why was Masa’s mother so proud of him?

2. How did Utari’s feelings change from earlier in the story?

3. What burst out of the crate?

4. **Make a prediction:** Where do you think Avery and Masa will go next? Why?

**Synonyms:** *Two words that mean the same.*
Fill in the blank with a synonym or similar word.

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<tbody>
<tr>
<td>Question</td>
<td>Answer</td>
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<td>-------------------------------------------------------------------------</td>
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<tr>
<td>1. How does the story make you feel? Why?</td>
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<tr>
<td>2. Who was the most interesting character? Why?</td>
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<tr>
<td>3. What was your favorite illustration? Why?</td>
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<tr>
<td>4. Do any characters make you laugh? Why?</td>
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<tr>
<td>5. Do any characters make you mad? Tell us about them.</td>
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<tr>
<td>6. What makes Avery and Masa good friends?</td>
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<tr>
<td>7. What was the author’s message in the book?</td>
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<tr>
<td>8. What would you tell Nukie Bluff if he came to your class?</td>
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<tr>
<td>9. What would you tell Avery and Masa if they came to your class?</td>
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<tr>
<td>10. STORY NARRATIVE: Where would you go with Avery and Masa if you could?</td>
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</tbody>
</table>

*All questions can be short answer or long reflection on separate sheet*
<table>
<thead>
<tr>
<th>Story Summary</th>
</tr>
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<tbody>
<tr>
<td><strong>CCSS.RL.2.5:</strong> Describe the overall structure of a story, including describing how the beginning introduces the story and the ending concludes the action. <strong>CCSS.RL.3.5:</strong> Refer to parts of stories, dramas, and poems when writing or speaking about a text, using terms such as chapter, scene, and stanza; describe how each successive part builds on earlier sections.</td>
</tr>
</tbody>
</table>

**I CAN UNDERSTAND A STORY, SUMMARIZE DETAILS AND PROVIDE EVIDENCE**

First, ________________________________________________________________

Then, ________________________________________________________________

At the end____________________________________________________________

I think ________________________________________________________________
Character Analysis

**Essential Questions:** How do you know about the characters? How do the characters change during the story?

While reading, or during a second read, create a character map for Avery or Masa. In each corner of the page, ask a specific question to be answered using evidence from the text.

1. **What is a quote spoken by the character that tells about his/her personality?** Hint: Characteristics
2. **What would the character say is the most important event in the story?** Why?
3. **What change in the story would the character have made if they had the power to do so?**
4. **What is one thing you will always remember about this character?** Why?

This can be used as a whole group recording sheet, group work or an individual activity page. With small group responses, students can each be assigned one of the questions to be responsible for and given a different colored marker to make a visual distinction between responses. Quotes from the text can be added to provide evidence for each response.

Find a partner who chose the same character as you. Were your answers the same or different? Were you surprised by your partner’s answers? Now, find a partner who chose a different character. Were you surprised by the answers your partner gave?
Friend Activity

Friends come in all shapes and sizes and they can be very different or have a lot in common. Find out something new about your friends in class.

**I UNDERSTAND THE VALUE OF DIVERSITY AND ACCEPTANCE**

<table>
<thead>
<tr>
<th>Has a pet</th>
<th>Has a birthday in the summer</th>
<th>Loves Avery and Masa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loves to dance</td>
<td>Says no to bullying</td>
<td>Loves our teacher</td>
</tr>
<tr>
<td>Loves swimming</td>
<td>Loves to read</td>
<td>Loves to play soccer</td>
</tr>
<tr>
<td>Would eat cookies for dinner</td>
<td>Has a brother or sister</td>
<td>Loves pizza</td>
</tr>
<tr>
<td>Loves to recycle</td>
<td>Wants to protect animals</td>
<td>Has been to the local zoo</td>
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</tbody>
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STEAM Activity

Turn a Crate Into a Planter

NOT to be used as a cage for an endangered animal, but to grow a plant!

I CAN USE DETAILS FROM THE STORY AS INSPIRATION TO SOLVE A PROBLEM

Science and Engineering Practices – (Asking Questions and Defining Problems) Define a simple design problem that can be solved through the development of an object, tool, process, or system and includes several criteria for success and constraints on materials, time or cost.

Essential Question: Can you solve a problem by creating a device using only the materials provided?

Java Lava Planter: Students can use a variety of materials, provided by the teacher, to make a crate NOT to be used as a cage for an animal, but to grow a plant.

Provide the following materials; Popsicle sticks, scissors, glue.

Students can work in pairs or groups if they choose larger versions. The style and type of crates can vary by student imagination and ingenuity.

1. You may want to soak the Popsicle sticks in water for a few minutes. This makes them easy to cut.
   Students can examine the crates on page 6 to come up with a design.
2. Teacher guides students throughout to ensure an even design.
3. Comparing sticks to each other helps guide the measurements for each side. Students can start gluing sticks together with a brace, either on the corner or diagonally through the middle.
4. Once one side is complete, have the student mirror the design for the other side.
5. If students are creating a cube, they can repeat the design 4 more times.
6. Glue the 4 sides together on the base. If it isn’t very stable, you can try sticking 2 small sticks to the bottom of the crate. This will hold the base firmly in place.
7. Students can paint and personalize their crates as colorful as they want. Done!

Extension/collaboration activity: Students can use the new planters to build a class garden. Flowers, herbs and succulents are great choices for the class. Choosing plants that are drought friendly are recommended. Thanks for helping the environment!
Avery’s Vocabulary Adventures

To use with chapter vocabulary

With the help of your teacher, choose a spelling adventure for each chapter vocabulary list (Students can do the same one multiples times). Complete them on a separate piece of paper.

Complete 10 adventures to stop Nukie Bluff from finding Avery!

<table>
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<tr>
<th>SYLLABLES</th>
<th>DEFINITIONS</th>
<th>CREATE YOUR OWN SENTENCES</th>
<th>COMPLETE PAGES 29-30</th>
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<tr>
<td>ABC ORDER</td>
<td>CREATE YOUR OWN STORY</td>
<td></td>
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<tr>
<td>3X EACH</td>
<td>FIND THE WORD IN THE STORY</td>
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</table>
Reading Detective Word Search

Help Avery and Masa find the lost words

Bravery  Cargo  Chaos  Critter  Eerie
Endangered  Forbidden  Horizon  Nectar  Poaching
Protectors  Quest  Rivets  Sage  Toxic
Typhoon

22
Glossary of Terms

Accompanied - To go along with
Amigos - Spanish word that means “friends”
Bravery - To have courage, to face fear
Cargo - Goods carried by a ship or vehicle
Chaos - Complete disorder and confusion
Critter - A small animal
Disoriented - Confused, mixed up
Eerie - Weird, scary, mysterious
Elegant - Graceful, polished
Endangered - Threatened with extinction
Ferociously - Angry as a wild beast
Flickering - An unsteady or wavering light
Flora - The plants and vegetation of a specific place
Forbidden - Not allowed, prohibited
Gesture - a courteous motion, a kind intention
Horizon - The line that divides the earth and the sky
Impenetrable - Cannot pass through
Incompetence - To lack ability, unable to complete
Inhabited - To live or dwell in
Nectar - A sugary sweet fluid taken from plants
Poaching - Illegal taking or stealing of animals
Quest - A mission with a purpose to find something
Rivets - A short metal bolt for holding things together.
Sacrifice - To give up something for a better purpose
Sage - Wise, very smart, profound
Scurried - Ran quickly
Surging - The rolling swell of the sea or a wave
Toxic - Poisonous
Typhoon - A very strong storm in the Indian Ocean
Unison - Together, in harmony, at the same time
AVERY MASK
BE A PROTECTOR AND JOIN THE ADVENTURE!

• Get updates on Avery and Masa!

• Tell us about your classroom!

• Invite your friends!

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