



### About the Book

Text Type: Nonfiction/Descriptive Page Count: 20 Word Count: 934

#### Book Summary

In this piece of descriptive nonfiction, the author includes sensory details to create a mental picture for readers as they journey around the equator. Readers see what life is like on the snowy top of Mount Kenya as well as along the hot, steamy Amazon and Congo Rivers. Traveling to Singapore, Indonesia, Brazil, Congo, and Kenya, readers see that the world is full of variety—even along the same latitude line. Maps, charts, and photographs support the text.

### About the Lesson

#### Targeted Reading Strategy

- Ask and answer questions

#### Objectives

- Use the reading strategy of asking and answering questions to understand text
- Identify details to compare and contrast countries
- Identify and use complex sentences
- Understand and create compound words

#### Materials

Green text indicates resources available on the website

- Book—*Expedition Zero* (copy for each student)
- Chalkboard or dry erase board
- World map
- Highlighters for each student (optional)
- Ask and answer questions, compare and contrast, complex sentences, compound words worksheets
- Discussion cards



Indicates an opportunity for students to mark in the book. (All activities may be demonstrated by projecting book on interactive whiteboard or completed with paper and pencil if books are reused.)

#### Vocabulary

- Content words:  
 Story critical: *equator (n.)*, *mosques (n.)*, *rainforest (n.)*, *stilts (n.)*, *terraces (n.)*, *tropical (adj.)*  
 Enrichment: *cassava (n.)*, *climate (n.)*, *insect repellent (n.)*, *Muslims (n.)*, *plantain (n.)*, *symphony (n.)*

### Before Reading

#### Build Background

- Write the word *equator* on the board. Have students share what they know about the subject. Encourage them to share what they know about where the equator is located, and have a volunteer point it out on both a map and a globe. Ask students if they know what temperatures are like at the equator and to explain why they think that it is so.
- Using a large world map, point out to students what countries the equator runs through.

- Create a KWLS chart on the board and hand out the [ask-and-answer-questions worksheet](#). Review or explain that the *K* stands for knowledge we know, the *W* stands for information we want to know, the *L* stands for the knowledge we learned, and the *S* stands for what we still want to know about the topic. Revisit what students already know about the equator and fill in the first column (*K*) on the board with information students know about the topic. Have students complete the same section of their worksheet.
- Ask students what they would like to know about countries on the equator. Have them fill in the second column (*W*) of their worksheet. Write their questions on the class chart.

### Preview the Book

#### Introduce the Book

- Give students their copy of the book. Guide them to the front and back covers and read the title. Have students discuss what they see on the covers. Encourage them to offer ideas as to what type of book it is (genre, text type, fiction or nonfiction, and so on) and what it might be about.
- Show students the title page. Discuss the information on the page (title of book, author's name).
- Preview the table of contents on page 3. Remind students that the table of contents provides an overview of the book. Ask students what they expect to read about in the book, based on what they see in the table of contents. (Accept all answers that students can justify.)

#### Introduce the Reading Strategy: **Ask and answer questions**

- Discuss with students how having prior knowledge about the topic, and asking and answering questions while reading, can help readers understand and remember the information in a book.
- Direct students to the table of contents. Remind them that the table of contents provides an overview of the information in a book and how it is organized. After previewing the table of contents, use it to model asking questions.  
*Think-aloud: I can use the table of contents to think of questions I would like to have answered about the equator. For example, section 2 is titled "Starting Out in Singapore." Reading this makes me think that Singapore must be a place located on the equator. I wonder what the climate is like there. I'll have to read the book to find out. I'll write this question on the chart.*
- Have students look at the other section titles. Have them write any questions they have, based on the covers and table of contents, in the *W* section of their ask-and-answer-questions worksheet.
- Have students preview the rest of the book, looking at the photographs, charts, and maps. Invite students to read through the glossary. Have them add any additional questions they might have to their ask-and-answer-questions worksheet. Invite students to share their questions aloud. Write shared questions on the class chart.
- As students read, encourage them to use other reading strategies in addition to the targeted strategy presented in this section.

#### Introduce the Comprehension Skill: **Compare and contrast**

- Explain that one way an author helps readers understand information in a book is to tell how topics in the book are alike and different.
- Have students look at the map on page 4. Use it to model how to compare and contrast.  
*Think-aloud: This map shows our world, and I can see that many different countries are at zero degrees latitude (point to the equator). If we look on a larger map, we can see that two of these countries are Brazil and Uganda. They are alike in some ways and different in other ways. One way they are alike is that they are both located on the equator. One way they are different is that Brazil is very large, while Uganda is much smaller.*
- Model how to compare and contrast information using a Venn diagram. Draw a Venn diagram on the board. Label the left circle *Brazil* and the right circle *Uganda*. Explain that information relating to Brazil is written in the left side of the left circle (*large country*). Information that relates to Uganda is written in the right side of the right circle (*small country*). Explain that in the middle where both circles overlap, information is written about what the countries have in common (*on the equator*).

- Have students identify other similarities and differences between Brazil and Uganda. Record these on the Venn diagram.

### Introduce the Vocabulary

- Write the following content vocabulary words on the board: *equator*, *rainforest*, *insect repellent*, and *mosques*. Read the words aloud with students. Ask them to share what they know about the meaning of each word. Point out to students that using familiar words might help them identify the meanings of the words. (For instance, the word *rainforest* is a compound word, and the two words that make up the compound word can help them in thinking about what *rainforest* might mean.)
- Write the content vocabulary words on four different posters (one word per poster). Place students in small groups and assign each group to a poster. Have them discuss what they know about the meaning of their word and write a definition on the poster. Rotate the groups and have them repeat the process with the other words.
- Review all four words and the information about the words that students wrote on the posters. Create a single class definition for each word, based on students' knowledge, and write it on the board.
- Have a volunteer read the definition for each word in the glossary. Compare students' definitions with the glossary definitions. Use the comparison to modify the definitions on the board.

### Set the Purpose

- Have students think about what they already know about countries on the equator as they read the book to find answers to their questions. Have them write what they learned in the *L* section of their ask-and-answer-questions worksheet.

## During Reading

### Student Reading

- **Guide the reading:** Have students read to the end of page 6. Remind them to look for information about countries on the equator that will answer questions on their ask-and-answer-questions worksheet. Encourage students who finish early to go back and reread.
- When students have finished reading, have them circle any questions on their ask-and-answer-questions worksheet that were answered and write any new questions that were generated.
- Model answering a question and filling in the third section (*L*) of the KWLS chart.  
*Think-aloud:* *I wanted to know what the climate is like in Singapore. I found out that the tropical heat takes your breath away and that plants love Singapore's hot, wet weather. I also read that this small island country has a very large city that is one of the world's busiest ports. I wonder if all of the countries on the equator grow fruits and tropical flowers in the hot, wet weather. I will write this question on my chart.*
- Have students write answers to the questions they circled in the *L* section of their ask-and-answer-questions worksheet. Invite them to share the information they learned and the questions they generated as they read the book. Record shared responses on the class KWLS chart.
- **Check for understanding:** Have students read to the end of page 9. Have them write any answers they found while reading in the *L* section of their ask-and-answer-questions worksheet and additional questions they raised in the *W* section. Invite them to share the information they learned and the questions they generated as they read pages 7 through 11. Write shared responses on the class KWLS chart.
- Have students work with a partner to compare and contrast Singapore and Indonesia, and write the information on a Venn diagram on a separate piece of paper. Discuss their responses aloud as you create a Venn diagram on the board.

- Have students read the remainder of the book. Remind them to continue to look for and write answers to their ask-and-answer-questions worksheet questions and to look for information to compare and contrast. Encourage them to add new questions they might have to their worksheet as they read.



Have students make a question mark in their book beside any word they do not understand or cannot pronounce. Encourage them to use the strategies they have learned to read each word and figure out its meaning.

### After Reading

- Ask students what words, if any, they marked in their book. Use this opportunity to model how they can read these words using decoding strategies and context clues.

### Reflect on the Reading Strategy

- **Think-aloud:** *I wanted to know if all of the countries on the equator grow fruits and tropical flowers in the hot, wet weather. I read that Indonesia's islands are perfect for growing rice in the volcanic soil. I also read that Manaus, Brazil, has a humongous fish market because it is located on the Amazon River. In Kenya, a bamboo forest grows in the hot, wet weather, but Mount Kenya, which is also on the equator, has lots of snow! I'd like to know more about the varying climates of Kenya. I will write this in the S column of my chart.*
- Ask students to share questions they added to their ask-and-answer-questions worksheet while reading, and ask them what questions were answered (or not answered) in the text. Have students write answers they found while reading in the L column of their worksheet.
- Reinforce that asking questions before and during reading, and looking for the answers while reading, keeps readers interested in the topic. It also encourages them to keep reading to find answers to their questions and helps them understand and enjoy what they have read.
- Point out to students that all of their questions may not have been answered in this text. Brainstorm other sources they might use to locate additional information to answer their questions. Invite students to fill in the final section (S) of their ask-and-answer-questions worksheet with information they would still like to know about the different countries on the equator.

### Reflect on the Comprehension Skill

- **Discussion:** Review with students the similarities and differences between Singapore and Indonesia. Add any new information to the Venn diagram on the board. Review how the information is organized in the Venn diagram.
- **Check for understanding:** Have students provide examples of how Manaus and Kinshasa are alike and different. Record this information on a new Venn diagram on the board.
- **Independent practice:** Introduce, explain, and have students complete the **compare-and-contrast worksheet**. If time allows, discuss their responses aloud.
- **Enduring understanding:** In this book, you learned about countries located on the equator and the many different ways in which their people live. Now that you know this information, does the place where people live affect the way in which they live?

### Build Skills

#### Grammar and Mechanics: **Complex sentences**

- Write the following sentence on the board: *Throw in an umbrella \_\_\_\_\_ it rains often.*
- Have students read the sentence and suggest words that belong in the blank to complete the sentence (*because, since, as*).

- Review or explain that a *subordinating conjunction* is a word that joins together an independent clause and a dependent clause. Point to the examples that students suggested to complete the sentence on the board. Explain that these subordinating conjunctions join parts of sentences together to form a *complex sentence*. List examples of subordinating conjunctions on the board (*after, although, as, as if, because, before, for, it, once, since, so, than, that, though, unless, until, when, whenever, where, whereas, wherever, whether, while*).
- Reread the sentence on the board, including a subordinating conjunction in the sentence. (*Throw in an umbrella because it rains often.*) Underline *Throw in an umbrella*. Explain that this part of the sentence is called the *independent clause*. Circle *because it rains often*. Explain that the part of the sentence that follows the conjunction is called the *dependent clause*. Point out that even though both sentence parts contain a subject and verb, the dependent clause does not express a complete thought and is not a sentence that can stand alone.
- Ask students to turn to page 13. Write the following sentence from the book on the board: *Before you leave Manaus, you check the weather in the Democratic Republic of the Congo.* Have students identify the subordinating conjunction (*before*), the dependent clause (*Before you leave Manaus*), and the independent clause (*you check the weather in the Democratic Republic of the Congo*). Point out that in this example, the dependent clause comes at the beginning of the sentence.
- Have students read the sentence rearranged so the independent clause is at the beginning (*You check the weather in the Democratic Republic of the Congo before you leave Manaus.*). Point out that either sentence is correct. However, when the dependent clause is at the beginning of the sentence, a comma often separates the clauses.



**Check for understanding:** Have students highlight the following sentence from page 10 in their book: *Once you leave Indonesia, you fly east along the equator.* Have students underline the dependent clause (*Once you leave Indonesia*) and circle the independent clause (*you fly east along the equator*). Ask students to identify the conjunction (*once*).

- **Independent practice:** Introduce, explain, and have students complete the **complex sentences worksheet**. If time allows, discuss their responses.

### Word Work: **Compound words**

- Write the word *rainforest* on the board. Ask students which two words were joined together in the word *rainforest* (*rain* and *forest*). Explain that this word is called a *compound word*. A compound word contains two words that together create one word meaning. Explain that the definitions of the two separate words can help students figure out the meaning of the bigger word (a *forest* that gets a lot of *rain*).
- Write the words *lowlands*, *air-conditioning*, and *Northern Hemisphere* on the board. Tell students that these are examples of different types of compound words. Each example has two parts that make up one word meaning; however, some compound words are separated by hyphens, some are joined, and some are separate.
- Have students turn to page 5 in the book. Read the following sentence: *Its shiny skyscrapers make this small island country look very large.* Have students identify the compound word (*skyscrapers*). Ask students to identify the two separate words that make up the compound word (*sky* and *scrapers*). Ask a volunteer to use the definitions of the two smaller words to figure out the meaning of the bigger word (buildings so tall they seem to *scrape* the *sky*).
- **Check for understanding:** Have students turn to page 17 in the book. Read the paragraph aloud while students follow along. Ask them to identify four compound words (*five-day*, *Sirimon Park*, *treelike*, and *Mount Kenya*). Ask students to identify the two separate words that make up each compound word (*five-* and *day*, *Sirimon* and *Park*, *tree* and *like*, *Mount* and *Kenya*). Discuss the definition of each word, using the smaller words to figure out the meaning.
- **Independent practice:** Introduce, explain, and have students complete the **compound words worksheet**. When they finish, discuss their answers aloud.



### Build Fluency

#### Independent Reading

- Allow students to read their book independently. Additionally, partners can take turns reading parts of the book to each other.

#### Home Connection

- Give students their book to take home to read with parents, caregivers, siblings, or friends. Have students also take home their completed ask-and-answer-questions worksheet and explain to someone at home what each column means. Have them share the information they wrote on the worksheet.

### Extend the Reading

#### Descriptive Writing Connection

Review with students that in descriptive writing, the author includes sensory details to create a realistic experience for readers. Have students write a descriptive paragraph about a favorite room in their house. Remind them to add details that help readers understand how it feels and smells, and what sounds might be heard in the room. Encourage writers to read their final paragraph aloud in a small group. Visit [Writing A-Z](#) for a lesson and leveled materials on expository writing.

#### Social Studies and Art Connection

Give students a copy of a world map and have them find each location that was mentioned in the book (Southeast Asia, Singapore, Indonesia, Java, Bali, Amazon Rainforest, Pacific Ocean, Amazon River, Manaus, Brazil, Democratic Republic of the Congo, Atlantic Ocean, Kinshasa, Congo River, Central Africa, Kenya, Africa, Nairobi, Nanyuki, and Mount Kenya). Have them identify each location on land with a green pencil and label each location on water with a blue pencil. If time allows, encourage them to add illustrations to their map from information gathered in the book.

#### Skill Review

[Discussion cards](#) covering comprehension skills and strategies not explicitly taught with the book are provided as an extension activity. The following is a list of some ways these cards can be used with students:

- Use as discussion starters for literature circles.
- Have students choose one or more cards and write a response, either as an essay or as a journal entry.
- Distribute before reading the book and have students use one of the questions as a purpose for reading.
- Cut apart and use the cards as game cards with a board game.
- Conduct a class discussion as a review before the book quiz.

### Assessment

#### Monitor students to determine if they can:

- consistently ask relevant questions about a topic prior to and during reading; locate answers to their questions and write them on a worksheet
- compare and contrast nonfiction details within the text during discussion and on a worksheet
- correctly identify the parts of complex sentences during discussion and on a worksheet
- correctly identify and form compound words during discussion and on a worksheet

#### Comprehension Checks

- [Book Quiz](#)
- [Retelling Rubric](#)