

EVEL R

Lesson Plan

Explorer's Guide to World Weather



About the Book

Text Type: Nonfiction/Informational Page Count: 16 Word Count: 972

Book Summary

Did you ever wonder what the weather might be like on the other side of your country? What about on the other side of the world? *Explorer's Guide to World Weather* explains how geography affects the climate. Readers will also learn how mountains, bodies of water, and time of year all affect the weather outside. Photos, maps, and graphs support the text.

About the Lesson

Targeted Reading Strategy

Summarize

Objectives

- Use the reading strategy of summarizing to understand nonfiction text
- Identify details to compare and contrast
- Identify and use adjectives in sentences
- Alphabetize words to the third and fourth letters

Materials

Green text indicates resources available on the website

- Book—Explorer's Guide to World Weather (copy for each student)
- · Chalkboard or dry erase board
- Dictionaries
- Compare and contrast, adjectives, alphabetical order 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

*Bold vocabulary words also appear in a pre-made lesson for this title on VocabularyA–Z.com.

Content words:

Story critical: climate (n.), elevation (n.), equator (n.), latitude (n.), precipitation (n.), temperature (n.)

Enrichment: insulation (n.), leeward (adj.), moisture (n.), prevailing winds (n.), rain shadows (n.), regions (n.), sea level (n.), water vapor (n.), windward (adj.)

Before Reading

Build Background

- Write the word *weather* on the board. Ask students what words come to mind when they think about the meaning of weather. Create a word web on the board with their responses.
- Tell students that children in other parts, or regions, of the world might respond with different answers when asked that question because weather is different in different parts of the world.
- Explain to students that this book will introduce them to a world full of weather.



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Lesson Plan (continued)

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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: Summarize

- Explain to students that one way to understand what they are reading is to stop now and then during reading to summarize in their mind what they are reading about in the book.
- Model how to summarize.

 Think-aloud: As I read this book, I am going to stop every now and then to remind myself about the information I have read about so far. This helps me remember what I'm reading and makes me think about new information. When I finish reading the book, I should be able to tell, in my own words, some of the information about weather all over the world that I have read about.
- 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 photographs on page 14 and the back cover.
- Model how to compare and contrast using photographs.
 Think-aloud: These two photographs show different regions on Earth. They are alike in some ways and different in some ways. Some ways they are alike include that they are all on planet Earth and they have both plant and animal life. Some ways they are different include that they have different climates, are in different places, and have different plants and animals.
- Model how to compare and contrast information using a T-chart. Draw a T-chart (see compare-and-contrast worksheet) on the board. Looking at the two photographs, label the left side *Mountain Range* and right side *Desert*. Explain that information relating to the mountain range is written in the left side of the chart. Information that relates to the desert is written on the right side of the chart. The T-chart helps people to visually compare the two topics.
- Have students identify other similarities and differences between the photographs. Record this information on the T-chart.

Introduce the Vocabulary

- Have students turn to the table of contents on page 3 and read the section titles. Ask volunteers to predict what these items might have to do with weather or how they affect weather.
- Point out the glossary at the back of the book. Review or explain that a glossary and a dictionary contain lists of words and their definitions.
- Model how students can use a dictionary to find a word's meaning. Have them locate the word
 insulation in the dictionary. Invite a volunteer to read the definition for insulation. Have students
 compare the dictionary definition with the glossary definition. Have them compare these
 with their prior knowledge of the word. Point out that a dictionary often lists more than one
 definition for a word and that they must often read all of the definitions to find the meaning
 that most closely represents the context in which the word appears.
- Have students follow along on page 11 as you read the sentence in which the word *insulation* is found to confirm the meaning of the word. Repeat the exercise with the remaining vocabulary words.





Lesson Plan (continued)

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Set the Purpose

Have students read the book to learn more about weather around the world. Remind them
to stop after reading each section to review and summarize, in their own words, what they
have learned.

During Reading

Student Reading

- **Guide the reading:** Have students read to the end of page 6. Encourage those who finish before others to reread the text. When students are ready, discuss the important information they identified.
- Model summarizing important information in the book.

 Think-aloud: As I read up through page 6, I paused to summarize in my mind what I learned about Earth and how scientists measure its weather. For example, I read that there are two important things that describe weather: temperature and precipitation. I also read that climate is simply what the weather is like over long periods of time. I'll keep reading to learn more interesting facts about weather and climate. While I read, I'll summarize what I've read to help me remember the new information.
- Check for understanding: Have students read to the end of page 8. Invite some students to share the important information about the importance of the Sun, the shape of our planet, and the equator. Ask other students to summarize the "Try This" experiment on page 8. Have students write a brief summary of each section on a separate piece of paper after guiding their oral summaries.
- Remind students again about what it means to compare and contrast information in text. Have students read to the end of page 10. Create a new T-chart on the board and label the two sides *High Elevation* and *Low Elevation*. Discuss the information on page 10, and ask students to help you record the appropriate information on the correct side of the chart (for example: high elevations have colder climates; temperature drops as elevation increases; low elevations have warmer climates; mountains cause more precipitation on one side of the mountain than on the other).
- Ask students to draw a T-chart on a separate piece of paper. Have them fill it out using the information on page 11 comparing locations near to or far from large bodies of water. Have students share their responses, and discuss the ways they sorted the information.
- Have students read the remainder of the book. Remind them to think about the details in the book so they can summarize the information after they read and identify which information can be compared.

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

Ask students to explain how the strategy of summarizing helped them understand the book.
 Think-aloud: I know that summarizing keeps me actively involved in what I'm reading and helps me understand and remember what I've read. I know that I will remember more about weather and climates in different parts of the world because I summarized the information in my own words as I read the book.



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• Independent practice: Assign students one of the remaining sections of the book (pages 12–14) and have them write a summary on a separate sheet of paper. If time allows, invite students to read their completed summaries aloud.

Reflect on the Comprehension Skill

- **Discussion:** Review with students the similarities and differences between the seasons in different parts of the world. Review how this information would be organized on a T-chart.
- 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 how location on our planet affects the weather. Now that you know this information, what factors affect the weather patterns where you live?

Build Skills

Grammar and Mechanics: Adjectives

- Have students turn to the glossary at the back of the book. Point out the glossary terms prevailing winds, rain shadows, and water vapor. Explain to students that the small n in parentheses after the word means that the words are nouns, but it is actually the second word in each term (winds, shadows, and vapor) that are the nouns. The first words (prevailing, rain, and water) are being used as adjectives.
- Review or explain that *adjectives* are words that describe nouns or pronouns. An adjective can help the noun tell *which one, how many,* or *what kind*. Adjectives play an important role in helping the reader visualize and understand new vocabulary because they describe people, places, settings, and so on, more accurately or completely.
- Write the following sentence on the board: *In some places, people never need a heavy coat.*Point out the noun *coat* in the sentence and underline it. Ask students to identify a word that describes the coat *(heavy)*. In this case, the adjective is telling what kind of coat it is.
- Check for understanding: Write the following sentences on the board: Large bodies of water affect temperature and precipitation. In the southern hemisphere, the seasons are reversed. Have individual students come to the board and circle the adjective(s) in each sentence. Then have them underline the noun that each adjective describes.
- Independent practice: Introduce, explain, and have students complete the adjectives worksheet. If time allows, discuss their responses.

Word Work: Alphabetical order

- Review or explain the process of putting a list of words in alphabetical order by using the first and second letters.
- Write the words *climate* and *temperature* on the board. Have a volunteer explain which word would appear first in alphabetical order *(climate)* and *why* (because *c* comes before *t* in the alphabet).
- Write the words *leeward* and *latitude* on the board. Point out that the words begin with the same letter (*l*). Ask a volunteer to tell which word would appear first in alphabetical order and why (*latitude* because the second letter, *a*, in *latitude* comes before the second letter, *e*, in *leeward*).
- Explain to students that often, especially when looking up words in a dictionary, it is necessary to alphabetize to the third, fourth, fifth, and so on, letter.
- Check for understanding: Write the words wind and winter on the board. Have a student come to the board and circle which word would appear first in alphabetical order. Point out to students that they must look at the fourth letter of these words to alphabetize them correctly.
- Independent practice: Introduce, explain, and have students complete the alphabetical order worksheet. If time allows, discuss their responses.



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Lesson Plan (continued)

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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 them summarize some of the differences in weather in different parts of the globe with someone at home.

Extend the Reading

Informational Writing Connection

Have students reread page 14 of the book. Ask them to pick a place on the globe, as the book suggests, and find the answers to the questions on page 14. Provide print and Internet sources for students to use. Require students to answer the questions in paragraph form and complete a clean, edited version for display on a bulletin board or to bind in a book.

Visit Writing A–Z for a lesson and leveled materials on expository writing.

Social Studies Connection

Work with students to use maps, atlases, and globes to find the latitude and longitude of their city or town. Use the information in the book to help them understand how the latitude and longitude lines are laid out on the globe, starting at the equator. Students can also find the latitude and longitude of their selected location for the above writing activity.

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 guiz.

Assessment

Monitor students to determine if they can:

- accurately use details from the text to create section summaries during discussion and on a separate piece of paper
- compare and contrast nonfiction details within the text during discussion and on a worksheet
- correctly identify adjectives and the nouns they modify during discussion and on a worksheet
- correctly alphabetize words to the third and fourth letter during discussion and on a worksheet

Comprehension Checks

- Book Quiz
- Retelling Rubric