

### Focus Question:

*What is the potential impact of rising sea levels on coastal towns?*

### Book Summary

Text Type: Nonfiction/Informational

Sea levels are rising at an alarming rate, and cities all over the planet are preparing themselves. *Ready for Rising Seas?* is a powerful and important text that helps students understand the implications of rising sea levels and what we can do to slow that rise. The book can also be used to teach students how to make inferences and draw conclusions as well as how to summarize text.



### Lesson Essentials

#### Instructional Focus

- ☐ Summarize to understand text
- ☐ Make inferences and draw conclusions
- ☐ Describe information provided by graphics
- ☐ Recognize and use dashes
- ☐ Identify and use content vocabulary

#### Materials

- ☐ Book: *Ready for Rising Seas?* (copy for each student)
- ☐ Make inferences / draw conclusions, dashes, content vocabulary worksheets
- ☐ Discussion cards
- ☐ Book quiz
- ☐ Retelling rubric

#### Vocabulary

Boldface vocabulary words also appear in a pre-made lesson for this title on [VocabularyA-Z.com](http://VocabularyA-Z.com).

##### • Words to Know

**Story critical:** *encroaching* (adj.), *evacuation* (n.), *glaciers* (n.), *sea level* (n.), *strategies* (n.), *thermal expansion* (n.)

**Enrichment:** *atmosphere* (n.), *carbon dioxide* (n.), *catchments* (n.), *curtailing* (v.), *deforestation* (n.), *displace* (v.), *emissions* (n.), *fluctuated* (v.), *Industrial Revolution* (n.), *lagoon* (n.), *last resort* (n.), *legislation* (n.), *levees* (n.), *molecules* (n.), *reefs* (n.), *storm surge* (n.), *susceptible* (adj.), *wetlands* (n.)

- **Academic vocabulary:** *adjust* (v.), *control* (v.), *factor* (n.), *occur* (v.), *strategy* (n.), *usually* (adv.)

### Guiding the Reading

#### Before Reading

##### Build Background

Locate your town or city on a globe and discuss with students its proximity to the ocean. Write the words *rising sea levels* on the board to create an idea web. Have students work in small groups and provide each group with a piece of chart paper. Invite each group to create an idea web on the basis of their prior knowledge about rising sea levels. Invite students to consider and discuss the following questions while creating the web: *Why are sea levels rising? How will this affect people all over the planet? How could this affect your town or city? What can you do to help stop the sea levels from rising even higher?* Have each group share their idea webs with the class.

##### Introduce the Book

- Give students their copy of *Ready for Rising Seas?* 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, and so on) and what it might be about.
- Show students the title page. Discuss the information on the page (title of book and author's name).

##### Introduce the Reading Strategy: Summarize

Explain to students that engaged readers *summarize*, or create a brief overview, as they read. Explain to students that when readers summarize they also sequence and organize the events described in the book. Point out that a summary often answers the questions *who*, *what*, *when*, *where*, and *why*. Create a chart on the board with the headings *Who*, *What*, *When*, *Where*, and *Why*. Read aloud a summary from the back of a familiar book. Ask students what information is included in the summary and what information is omitted. Remind students that a summary includes only the most important details. Point out that a summary may include the entirety of the book or simply a section or chapter of a book.

### Guiding the Reading (cont.)

#### Introduce the Comprehension Skill: Make inferences / draw conclusions

- Explain to students that not all information in a book is directly stated. Discuss how sometimes the readers need to make inferences and draw conclusions by using details in the book to understand the indirect language used. Point out that an *inference* is a conclusion drawn by readers connecting clues in the text to information they already know. Explain that making inferences during reading allows readers to understand ideas in a text on a deeper level.
- Ask students to turn to the table of contents on page 3. Point out the section titled “Our Part in the Problem.” Ask students to make an inference about this section. Explain that this title points to the fact that rising sea levels are in part caused by humans. Discuss how, on the basis of this information, we can infer that there may be actions we can take to help slow the rising seas.

#### Vocabulary

Have students turn to the “Words to Know” box on the copyright page. Discuss each word with students. Then, have students turn to the glossary on pages 23 and 24. Explain that the glossary provides definitions for the vocabulary words in the book. Point out the use of each content word and academic vocabulary word in the book, and then use each word in a different model sentence. Have students work in groups to create posters for these words. Have them include on each poster the word and its part of speech, the definition, the word in an example sentence, and a picture illustrating the meaning of the word.

#### Set the Purpose

- Have students read to find out more about the implications of rising sea levels. Write the Focus Question on the board. Invite students to look for evidence in the book to support their answer to the question.
- Have students make a small question mark in their book beside any word they do not understand or cannot pronounce. These can be addressed in a future discussion.

### During Reading

#### Text-Dependent Questions

As students read the book, monitor their understanding with the following questions. Encourage students to support their answers by citing evidence from the book.

- *What are the two main factors that have caused sea levels to rise?* (level 1) page 5

- *In what ways did the Industrial Revolution impact rising sea levels?* (level 2) pages 8 and 9
- *How do carbon emissions cause a rise in the temperature of the seas?* (level 1) page 9
- *How will people in coastal cities be affected by rising sea levels? How does this compare to people living inland?* (level 2) pages 10–12
- *How is New Orleans’s strategy for rising sea levels similar to Kushiro’s? How is it different?* (level 2) pages 12–16
- *How can our actions right now affect the rest of the planet?* (level 3) multiple pages
- *What actions must be taken to avoid a crisis caused by rising sea levels?* (level 3) multiple pages

#### Text Features: Graphics

Have students turn to page 6 and locate the graphic. Point out that the additional text and image expands upon and clarifies the information discussed in the book. Ask a volunteer to explain what information the author is conveying through this graphic. Point out that such features are often present in nonfiction books. Have students discuss the following questions with a partner: *Why did the author include this image? Does it affect the way you feel about rising sea levels?* Have students share their discussions with the class.

#### Skill Review

- Remind students that a summary of a book or section of a book describes only the most important events and details. Have students work in groups and assign each group a case study from the text. Invite students to create an oral summary of the case study. Direct them to the chart on the board and review that a summary often includes *who*, *what*, *when*, *where*, and *why*. Invite students to share their summary with another group and have students give a thumbs-up signal if the summary addresses the most important details of the case study.
- Have students work independently to create a written summary of the book in its entirety, referring to the information on the board. Then, have students work with a partner to exchange summaries and provide feedback.
- Model making inferences and drawing conclusions. **Think-aloud:** *As I read about rising sea levels, I am aware of the details provided by the author, and I am also aware of the information that is not in the text but is inferred. By making inferences and drawing conclusions about the text, I am able to gather much more information about the topic than what is stated in the text. For example, as I read about the Greenland ice sheet and Antarctica, the author suggests that this melting process will not happen overnight; however, we are already seeing the effects. On the basis of this information, I can infer that the author believes that people and governments throughout the*

### Guiding the Reading (cont.)

*world need to start making changes immediately in order to slow down the warming process. Although the author does not state this directly, I can use the details in the text to make inferences and draw conclusions.*

- Model how to complete the **make-inferences / draw-conclusions worksheet**. Have students identify details from the book and prior knowledge they have about those details. Then, have students make inferences on the basis of that information. Have students discuss the inferences with a partner.

### 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.

### Skill Review

#### Graphic Organizer:

#### Make inferences / draw conclusions

Review the make-inferences / draw-conclusions worksheet that students completed. Have students share their work in groups. Invite volunteers to discuss their inferences with the class and share why and how they made those inferences.

### Comprehension Extension

**Discussion cards** covering comprehension skills and strategies not explicitly taught with the book are provided for extension activities.

### Response to Focus Question

Have students cite specific evidence from the book to answer the Focus Question. (Answers will vary, but sample responses may include the following: *With rising sea levels, coastal towns may experience massive flooding, damage to infrastructure, danger to citizens, and loss of drinking water.*)

### Comprehension Checks

- **Book quiz**
- **Retelling rubric**

### Book Extension Activities

#### Build Skills

#### Grammar and Mechanics: Dashes

- Explain to students that a *dash* (–) is a punctuation mark that is used for different purposes: to show an afterthought or summary at the end of a sentence and to set off or clarify information within a sentence.
- Write the following sentence on the board: *At the time, the lighthouse was placed 457 meters from the ocean—a safe distance.* Explain to students that in

this sentence, the dash is being used to add a thought or more information to the end of the sentence.

- Review or explain the difference between a dash and a hyphen: hyphens are used in compound adjectives, adverbs, and nouns. Point out that hyphens are shorter in length and are used to connect two or more words.
- **Check for understanding:** Have students reread pages 4 through 7 and highlight the sentences containing a dash. Ask a volunteer to explain how each dash is used.
- **Independent practice:** Introduce, explain, and have students complete the **dashes worksheet**. If time allows, discuss their answers aloud after students finish.

### Word Work: Content vocabulary

- Explain to students that many words in *Ready for Rising Seas?* involve scientific terms or ideas. Point out that the vocabulary words will also help them understand many of the cause-and-effect relationships between humans and rising levels of water.
- Have students turn to page 17 and locate the word *deforestation*. Point out that the word is in boldface print because the author feels that it is important for the reader to understand its meaning. Have students work with a partner to locate the part of the text that helps to define the word. Point out that often the author will either provide a direct definition of a boldface word or will give clues as to its meaning.
- **Check for understanding:** Write the following words on the board: *carbon dioxide, curtailing, molecules, wetlands*. Invite students to work in small groups and provide each group a piece of chart paper. Have them fold the chart paper into four sections and label each section with one of the content vocabulary words on the board. Have students use clues from the book to draw or write a definition for each word and then share their findings with the class.
- **Independent practice:** Introduce, explain, and have students complete the **content vocabulary worksheet**. If time allows, discuss their answers.

### Connections

- See the back of the book for cross-curricular extension ideas.