

## Teacher's Guide

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## Polar Bear Horizon - Smithsonian Oceanic Collection

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BOOK DESCRIPTION: It's early spring at the top of the world and snow stretches to the horizon and beyond. Polar Bear and her two cubs are growing hungry after spending the cold winter months in their den. When they emerge, Polar Bear checks for danger and waits for the cubs to acclimate to the ice. Learn about their long and dangerous journey to sea as this arctic adventure unfolds. How will Polar Bear find food and protect her hungry cubs? Reviewed by the Smithsonian Institution for accuracy, Polar Bear Horizon is a fun and informative story with beautifully detailed illustrations. This omBook also includes a glossary and a polar bear fact section.

**SUBJECT:** Life Science

**GRADE LEVELS: Pre-K to 2** 

## **USING omBooks IN THE CLASSROOM**

## **Reading Modes**

Read it Myself

- Read the story to your students or have the students read the story themselves
- Turn the pages to read at your own pace

## Read to Me

- Follow along as the story is read by the narrator
- · Turn the pages to read at your own pace

## Auto Play

- Follow along as the story is read by a narrator
- Pages turn automatically for reading at a controlled pace

## **Interactive Features**

- Tap a picture to hear and see the word associated with it
- Tap on an individual word to hear it pronounced
- Touch and hold a paragraph to hear it read by a narrator

## **Reading Dynamics**

## Large Group

- Connect your iOS or Android device to your classroom projector, TV, or computer monitor (see How-To Guide).
- Use the *Read it Myself* mode to read the story aloud, or use the *Read to Me* or *Auto Play* modes to present the story to the entire class.
- Use the discussion questions on page 3 to guide a whole-class discussion.
- Alternatively, if your students can read, project the questions on the screen. Invite students to partner up and discuss the story in pairs. Ask them to record their discussion on the iOS or Android device so you can assess their work.

## Small Groups

- Gather a small group of students and display the iOS or Android device so all can see.
- Use the *Read it Myself* mode to read the story aloud, or use the *Read to Me* or *Auto Play* modes to present the story to the small group.
- Use the discussion questions on page 3 to guide a group discussion.

#### **Partners**

- If you have enough devices in the classroom, invite students to read or listen to the story in pairs.
- Students can take turns reading pages, asking questions, and supporting each other.
- If your students can read, give them the discussion questions from page 3. Ask them to record their discussion on the iOS or Android device so you can assess their work.
- If your students are non-readers, invite the class to come back together as a large group. Guide a class discussion using the discussion questions on page 3.

## Independent

- If you have enough devices in the classroom, invite students to read or listen to the story independently.
- Students can use the interactive features to support their reading, and each student can explore the text and illustrations at an individualized pace.
- If your students can read, give them the discussion questions from page 3 and ask them to type or record their responses on the device.
- If your students are non-readers, invite the class to come back together as a large group. Guide a class discussion using the discussion questions on page 3.

## **DISCUSSING THE BOOK**

- 1. **Habitat:** What is it like where the polar bears live? How is it similar to where *you* live? How is it different? The polar bears live on ice. What would happen if the ice melts? What can *you* do to keep the ice from melting?
- 2. **Life Cycle:** What are the baby polar bears called? What time of year are the cubs born? Where are they born? How do the polar bears feed their cubs? How long do the cubs stay with Polar Bear? How long will *you* stay with *your* parents?
- 3. **Predators/Prey:** How does the polar bear check for danger? Which sense(s) does she use to check for danger (smell, sight, touch, taste, hearing)? What do polar bears eat? How do they find food? Which sense(s) do they use to find food (smell, sight, touch, taste, hearing)?
- 4. **Birds and Migration:** What types of birds live in the polar bears' environment? Where have the seabirds returned from? Why were they there? What types of birds live in *your* environment? Are they there all year, or do they migrate to other parts of the world?
- 5. **Seasons:** How long does summer last in the arctic? How long does summer last where *you* live? Why do the seasons change?
- 6. **Adaptations:** Why are polar bears white? Why do polar bears have blubber and fur? Why do polar bears have pads on their feet? How do these things help the polar bears in their environment?

#### **EXTENDING THE LEARNING**

<u>Polar Bear Horizon</u> provides an introduction to polar bears and the core concepts of life science. Encourage students to use the iOS or Android device as a tool to extend their learning. Some ideas:

- Research: Use your mobile device's web browser to research polar bears. Search for
  images, videos, news articles, and reference materials. You may also contact an "expert" on
  polar bears and invite him/her to do a video conference in your class via a video chat app
  (Skype, Facetime, GChat). Students can interview the expert to learn more about the topic.
- Social Responsibility: Polar bears are listed as "threatened" on the endangered species list. Brainstorm ways to protect them with your class. Use new media (blogs, Twitter, Facebook, Edmodo, Pinterest, wikis) to share text and images to advocate for the polar bears. Take this one step further by creating a documentary. Use the camera function on your mobile device to record your students and use a video editing app to put together a film about polar bears. Share the video online.
- **Geography:** Where do the polar bears live? Support your students in discovering where polar bears live. Locate those places on a map using a map application such as Google Earth. How far are the polar bears' homes from your home?
- Compare and Contrast: Relate the story back to your students. Ask questions like, "What do polar bears use for shelter? What do you use for shelter? How do polar bears get their food? How do you get your food? How do polar bears stay warm? How do you stay warm?" Encourage students to come up with their own questions and make a list of their responses. Once they've created a list of responses, they can find pictures online and take pictures in their environment that represent the similarities and differences between polar bears and themselves. They can use the images to create a large photo venn diagram to hang in the classroom.

## **SHARING YOUR WORK**

Have you used the <u>Polar Bear Horizon</u> omBook in your class? We'd love to hear about it! To share your experience, please visit the Education Center on our facebook page: <a href="https://www.facebook.com/OceanhouseMedia">https://www.facebook.com/OceanhouseMedia</a>.

## **DOWNLOADING THE APPS**

omBooks (Oceanhouse Media Digital Books) are available for purchase in the following stores:







