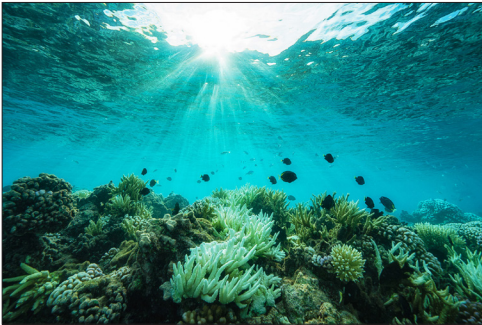


SAVE OUR OCEANS



SEA CHANGE

Marine ecologist Enric Sala offers hope for the effort to protect the world's oceans.

LEXILE: 1080L (930L alternate reading level)

SCIENCE (NGSS) STANDARD: Earth and Human Activity

COMMON CORE (CCSS) STANDARDS: RI.6-8.1, RI.6-8.3, RI.6-8.7, W.6-8.2

ENGAGE THE READER

Start the lesson by asking students to note down their responses to the following question: Why does the ocean matter? Then bring the class back together and have volunteers share their responses. Ask students to raise a hand if they think the ocean should be protected. Explain that only 8% of ocean waters are protected now. But today, students will read about Enric Sala and his Pristine Seas project, aimed at protecting more of our oceans.

QUESTIONS FOR CLOSE READING AND DISCUSSION

- Explain the relationship between whale poop and wildfires.
- Why does Enric Sala want to protect the ocean?
- What is the goal of the Pristine Seas project? What has been its impact so far?
- Do you think more of the ocean should be protected? Do you think more of it should be explored? Explain.

EXTEND LEARNING

Group the class into five groups, and pull up the National Geographic Pristine Seas page at [ti.me/PristineSeas](https://www.nationalgeographic.com/pristine-seas/). Show the video. Then assign each group the field notes from one of the five places included (the Federated States of Micronesia, the Marshall Islands, Niue, the Cook Islands, and Kiribati). Have groups scroll to the bottom of the field notes for their page to read the notes chronologically. Instruct each group to discuss and take notes about each trip and what was learned/studied. Bring the class back together and have groups share their findings with one another. Then ask: Why do you think the team shared these field notes publicly? Has being able to read them made any impact on you? Explain.

Share this blog post at [ti.me/fieldnotes](https://www.nationalgeographic.com/pristine-seas/). Discuss: How do field notes impact future generations? Invite students to try their hand at taking field notes.

COVER STORY QUIZ + ANSWER KEY

The cover quiz can be found on page 3 of this guide.

To create a digital quiz, you can use our template [here](#).

1. D (RI.2) **2. A** (RI.4) **3. C** (RI.3) **4. A** (RI.1) **5. D** (RI.6)

6. C (RI.7) **7. Answers will vary.** (W.1)



LUNAR LANDER PROBLEMS

A U.S. lunar lander mission is aborted after launch. NASA remains optimistic.

LEXILE: 900L (710L alternate reading level)

SCIENCE (NGSS) STANDARD: Earth's Place in the Universe

COMMON CORE (CCSS) STANDARDS: RI.6-8.1, RI.6-8.3, RI.6-8.5, RI.6-8.6

BEFORE READING

Begin with a brief discussion on the excitement of space exploration and the mysteries of the ocean. Present the following question: Is it more important to invest in space exploration or in the exploration of Earth's oceans? Have students discuss this in pairs or small group. Bring them back together and share the following data point: More than 80% of the ocean has never been mapped, explored, or even seen by humans. Ask if this changes their opinions. Invite students to read the article above and "Sea Change" to explore the two topics (ocean and space) further.

DISCUSSION QUESTIONS

- Why do you think humans are interested in exploring space?
- What potential benefits might we gain from space exploration?
- Considering the vastness of our oceans, what significance might lie in exploring them further?



THE BUSINESS OF BEES

Asli Samanci is a food scientist. Her company creates health products using substances made by bees.

LEXILE: 950L (830L alternate reading level)

SOCIAL STUDIES (NCSS) STANDARD: Production, Distribution, and Consumption

COMMON CORE (CCSS) STANDARDS: RI.6-8.1, RI.6-8.3, RI.6-8.9

BEFORE READING

Ask students if they know where the phrase "mind your own beeswax" comes from. Explain that it's said that women in the 18th and 19th centuries used beeswax to smooth their skin. Near a heat source it could melt. Onlookers were told to "mind your own beeswax" if they took notice of this. Can students name any other substances that come from bees? Tell them they'll be reading a bee substance that food scientist Asli Samanci uses in a product she makes.

DISCUSSION QUESTIONS

- As an entrepreneur, how does Asli Samanci use science?
- Why is sustainability important to Samanci?

CLOSING ACTIVITY

Challenge students to the Kahoot! quiz to see what they know about the insects that create propolis (ti.me/YHJbees). Then have them read a description of four substances produced by bees at ti.me/beeproducts. Challenge groups to choose one and design a product that uses the substance. They may do research for inspiration.

Name _____ Date _____

Use this week’s cover story, “Sea Change,” to answer the questions below. For questions 1–6, circle the letter next to the best answer. If you need more space to write your response to question 7, use the back of this page.

<p>1. How does plankton benefit the planet?</p> <p>A. It cleans whale poop from the ocean.</p> <p>B. It provides nutrients for algae.</p> <p>C. It cools the oceans by absorbing sunlight.</p> <p>D. It absorbs carbon dioxide, which is a planet-warming gas.</p>	<p>4. What is Sala’s solution for protecting the world’s oceans?</p> <p>A. Identify the most biodiverse areas and convince people to protect them.</p> <p>B. Encourage people to stop burning fossil fuels.</p> <p>C. Hope for the best.</p> <p>D. Focus on saving the whales.</p>
<p>2. According to the article, which quality makes Enric Sala an effective ocean advocate?</p> <p>A. his ability to explain scientific topics simply</p> <p>B. his documentary production</p> <p>C. his persuasive speaking</p> <p>D. his knowledge of ocean food chains</p>	<p>5. Which detail would not be included in a summary of this article?</p> <p>A. Pristine Seas has gotten 2.5 million square miles of coastline and ocean protected.</p> <p>B. Increasing ocean acidity weakens ocean habitats.</p> <p>C. Protecting our oceans is a cheaper way to lessen the effects of burning fossil fuels.</p> <p>D. In summer 2023, there was a wildfire in Canada.</p>
<p>3. The data included from the National Oceanic and Atmospheric Administration helps the reader understand</p> <p>A. the amount of the ocean that is protected.</p> <p>B. the increase in Colombia’s marine protected areas.</p> <p>C. the extent of the ocean that is warmer than normal.</p> <p>D. the decrease in healthy coral.</p>	<p>6. What is coral bleaching?</p> <p>A. a color change caused by cold water</p> <p>B. corals becoming healthier when cleaned</p> <p>C. coral losing its color as its food source disappears</p> <p>D. an indicator of a balanced ecosystem</p>

7. Describe one connection between the ocean and climate change.