

Image: Notice and Wonder



Notice

What do you notice?

Wonder

What do you wonder?

Read and Take Notes

The ocean is a vital part of our lives, even if we don't always think about it. It gives us air to breathe, controls the weather, and helps transport goods around the world. However, the ocean is changing due to climate change, pollution, and noise. To protect our oceans, we need to understand them better, and one way to do this is by studying the animals that live in the ocean.

Whales are incredible creatures that play a big role in our environment. They eat a lot and spread nutrients in the ocean, like cows on land. They also travel to places affected by climate change and can live for over 100 years.

Take Notes Here:

Read and Take Notes

Unfortunately, whales can get sick from the pollution in their home. In the past, it was dangerous to study whales up close, but now we have new ways to collect information without harming them. Drones are used to study whales and collect important data. Scientists can learn about what whales eat by studying their poop, and special dogs called Gators help find whale poo. By studying whale snot, scientists can learn about their health and the bacteria, DNA, and hormones inside their bodies.

Take Notes Here:

Read and Take Notes

A special drone was created to collect whale snot. It has four propellers and two cameras, and a round plastic dish called a petri dish is used to collect the snot. The drone is launched from a boat in Sydney, Australia, and collects the snot when humpback whales come up for air. The samples are then taken back to the lab to extract DNA and learn more about the whales' health. This research has shown that whales can carry viruses and deliver important messages about the ocean.

Take Notes Here:

Read and Take Notes

Studying the smallest organisms in the ocean using drones helps us understand changes in the environment that we can't see with our eyes. Drones make it easier for scientists to explore the vast ocean. We can all help protect marine wildlife by making small changes in our own lives, such as saying no to plastic straws and using reusable shopping bags. These actions can make a big difference for animals like whales. So next time you think about the ocean, remember what whales and their snot can teach us and smile knowing that we can all contribute to protecting our oceans.

Take Notes Here:



First, Then, Finally

Instructions: Summarise the reading in your own words by writing about what happened first, what happened next, and what happened last, Be sure to include the listed vocabulary words.

climate change

polluted

nutrients

mycorrhizae

drones

populations

propellers

symbiotic

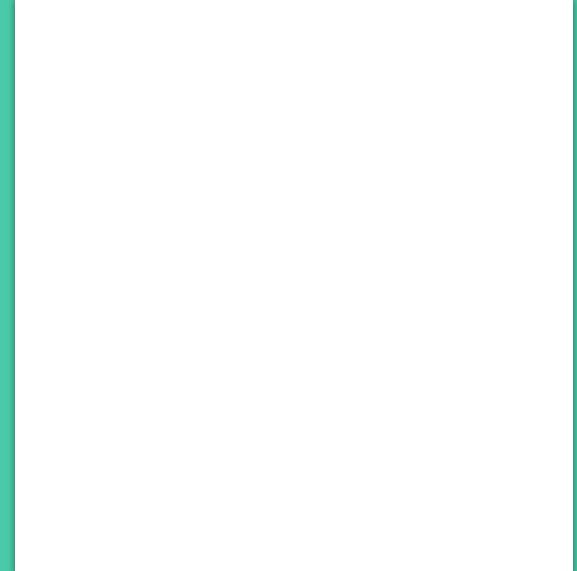
First:



Then:



Finally:



Short Answer Question

1. What are some ways in which the ocean is important to us?

| Answer the Question Be sure to clearly answer the question. | Cite Evidence Include evidence from the reading. | Explain the Evidence Explain how it supports your answer. |
|---|--|---|
| | | |

Short Answer Question

2. How do whales help spread nutrients in the ocean?

| Answer the Question Be sure to clearly answer the question. | Cite Evidence Include evidence from the reading. | Explain the Evidence Explain how it supports your answer. |
|---|--|---|
| | | |

Short Answer Question

3. What are some actions we can take to protect marine wildlife?

| Answer the Question Be sure to clearly answer the question. | Cite Evidence Include evidence from the reading. | Explain the Evidence Explain how it supports your answer. |
|---|--|---|
| | | |

Short Answer Question

4. Why is studying whale snot important for scientists?

| Answer the Question Be sure to clearly answer the question. | Cite Evidence Include evidence from the reading. | Explain the Evidence Explain how it supports your answer. |
|---|--|---|
| | | |

Short Answer Question

5. Based on the information in the text, what can studying whale snot tell scientists about the health of the ocean?

| Answer the Question Be sure to clearly answer the question. | Cite Evidence Include evidence from the reading. | Explain the Evidence Explain how it supports your answer. |
|---|--|---|
| | | |

Short Answer Question

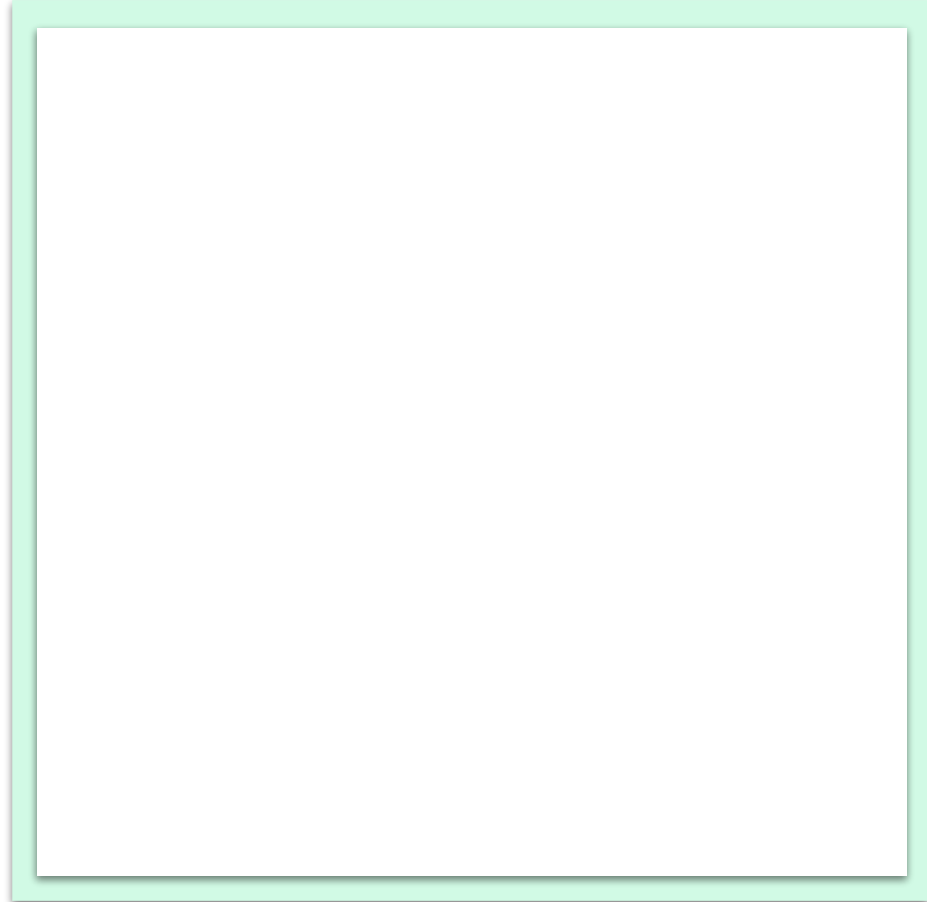
6. How does studying whale snot help scientists understand changes in the environment that are not visible to the naked eye?

| Answer the Question Be sure to clearly answer the question. | Cite Evidence Include evidence from the reading. | Explain the Evidence Explain how it supports your answer. |
|---|--|---|
| | | |

Short Answer Question

1. What are some ways in which the ocean is important to us?

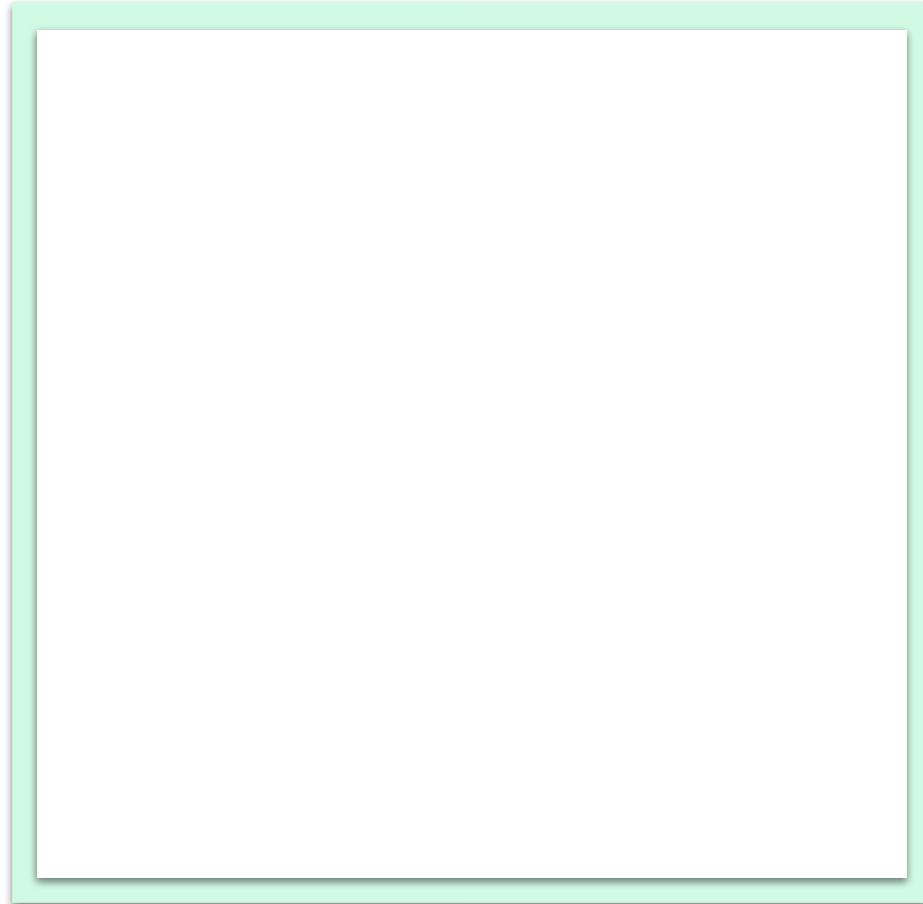
Write your response below:



Short Answer Question

2. How do whales help spread nutrients in the ocean?

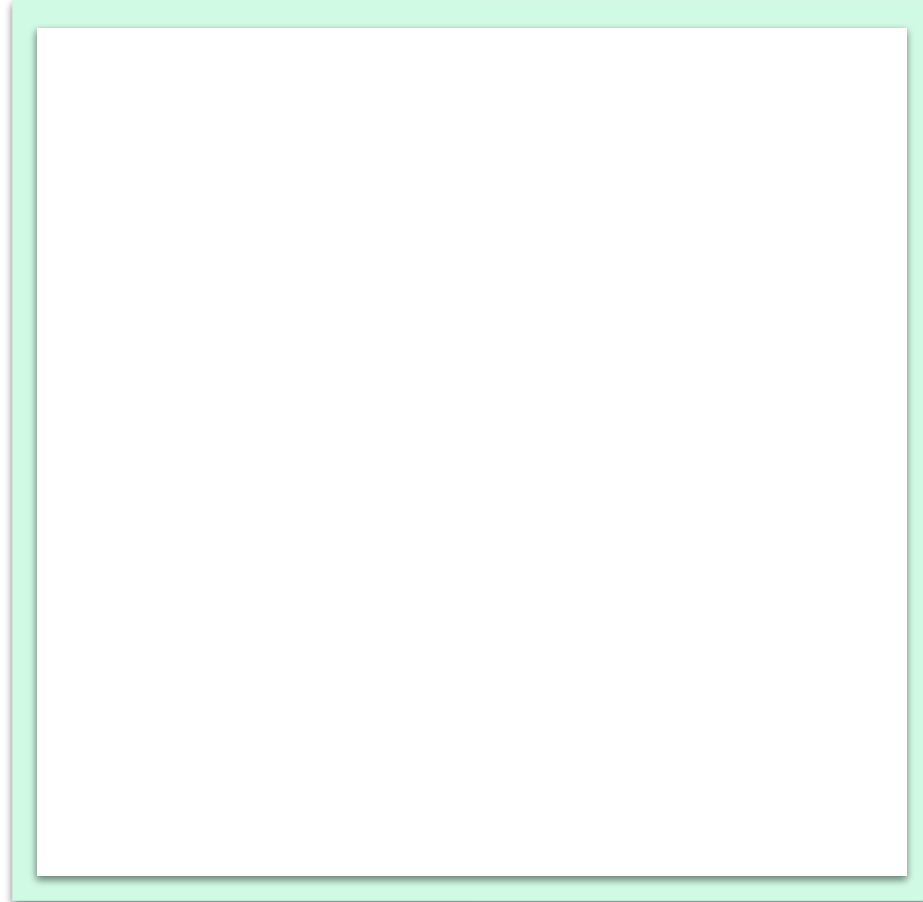
Write your response below:



Short Answer Question

3. What are some actions we can take to protect marine wildlife?

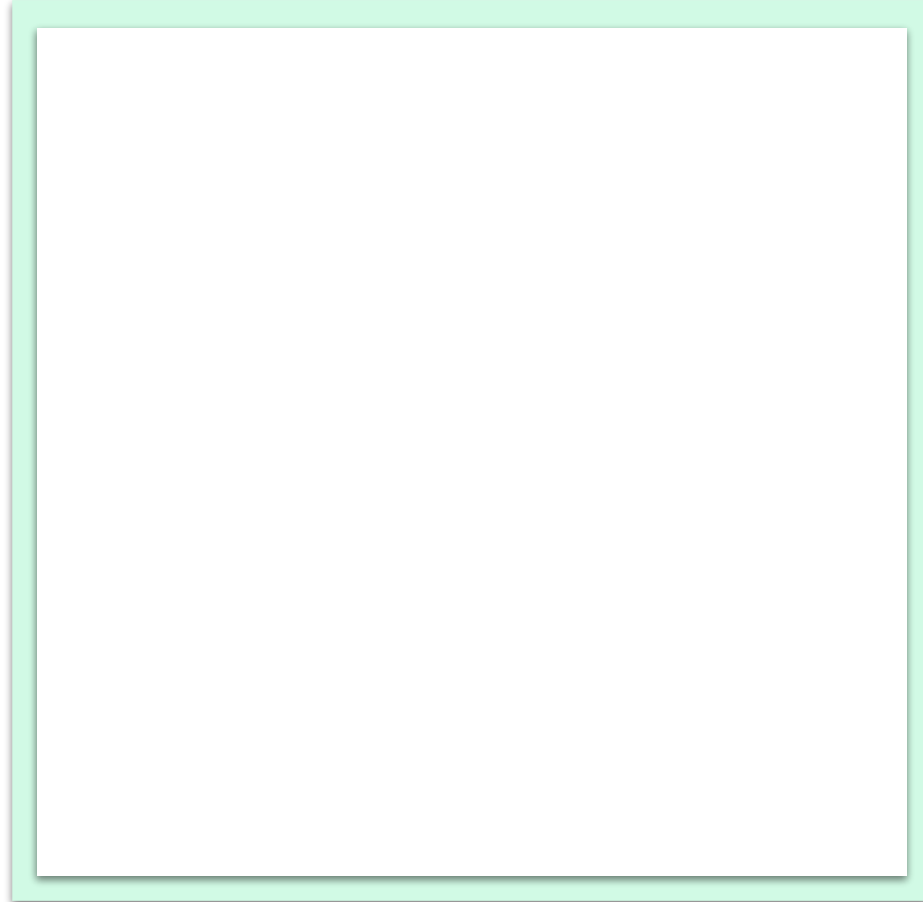
Write your response below:



Short Answer Question

4. Why is studying whale snot important for scientists?

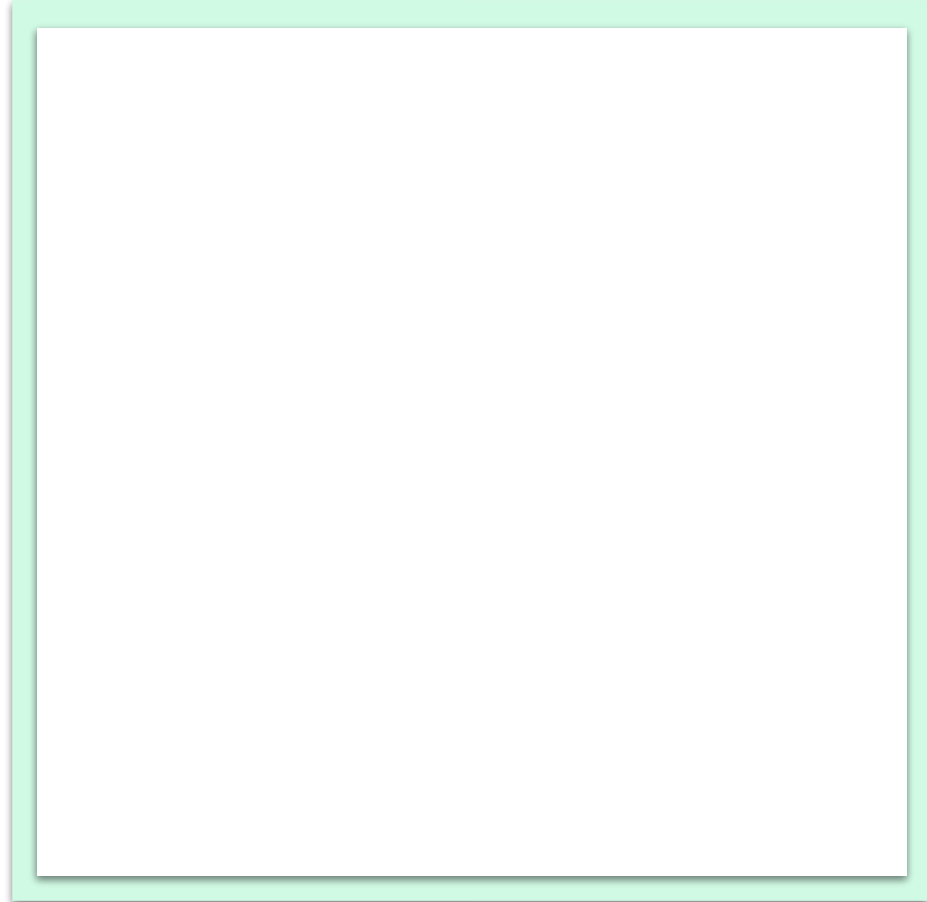
Write your response below:



Short Answer Question

5. Based on the information in the text, what can studying whale snot tell scientists about the health of the ocean?

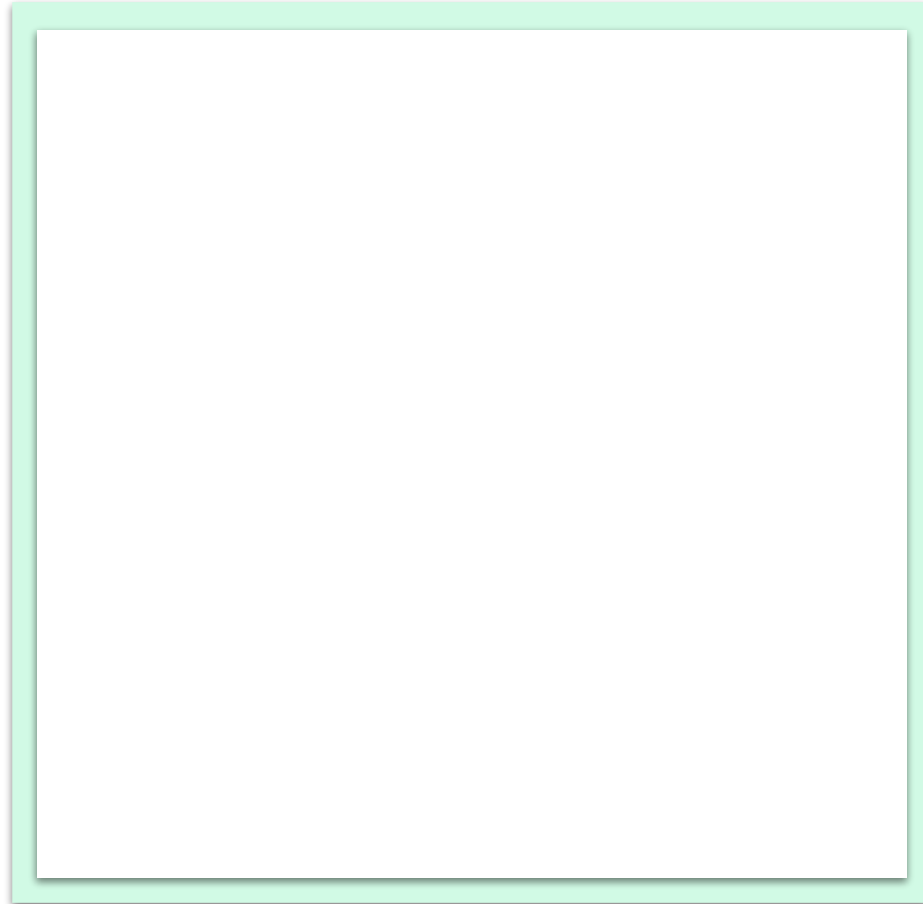
Write your response below:



Short Answer Question

6. How does studying whale snot help scientists understand changes in the environment that are not visible to the naked eye?

Write your response below:



Open Ended Question

Write your answer below. Then, when instructed, discuss your answers with your partner or group. Use the second box to take notes on what their answers were in the space provided.

1. How does the ocean impact your daily life? Reflect on the ways in which you interact with the ocean and its resources.

Your Answer:

What did your partner or group say?

Open Ended Question

Write your answer below. Then, when instructed, discuss your answers with your partner or group. Use the second box to take notes on what their answers were in the space provided.

2. What actions can you take to help protect the ocean and marine wildlife? Consider the simple actions mentioned in the text and think about how you can incorporate them into your own life.

Your Answer:



What did your partner or group say?



Open Ended Question

Write your answer below. Then, when instructed, discuss your answers with your partner or group. Use the second box to take notes on what their answers were in the space provided.

3. Why do you think studying whales is important for understanding the health of the ocean? Reflect on the role that whales play in the ecosystem and how changes in their populations can indicate problems in the ocean.

Your Answer:

What did your partner or group say?

Open Ended Question

Write your answer below. Then, when instructed, discuss your answers with your partner or group. Use the second box to take notes on what their answers were in the space provided.

4. Reflect on the impact of climate change, pollution, and noise on the ocean. How do these factors affect the health and well-being of marine life? Consider the long-term consequences and potential solutions.

Your Answer:



What did your partner or group say?

