



WILD CLASSROOM

# Conservation in the Classroom

*Life in a Frozen World: Antarctica*

December 7, 2021

3 pm EST

Suggested grade levels: 2–6

Watch live on [Conservation in the Classroom](#)

View recording on the [Wild Classroom YouTube channel](#)

Join us as we take a journey to the most remote and wild region on the planet — Antarctica. Emily Grilly, WWF's Antarctic program manager, will share her experience working to protect this unique region and the animals that call it home, especially the penguins. She will teach us everything she knows from Adélie and gentoo penguins to the amazing emperor penguin!

## The presenter



**Emily Grilly**

WWF Antarctica program manager

## BELL-RINGERS

Help prepare your learners by introducing the topic with these warm-up questions.

### Identify

Antarctica is covered in various forms of ice, including sea ice (forms in the ocean), glaciers (form on land), and icebergs (chunks of glacial ice that break off glaciers and fall into the ocean). View the three photos below and label each as **GLACIER**, **ICEBERG**, or **SEA ICE**.



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1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

### Construct

Although some may think Antarctica is a lifeless frozen world, it is actually full of wildlife! Use the Antarctic animals below and create a food chain with at least three members.

Emperor penguin

Krill

Leopard seal

Humpback whale

Albatross

Algae

Fish

Orca

Squid



### Consider

Why do you think penguins don't fly? Think about how animals have evolved and adapted to survive in their environments.

### Explain

Climate change is causing global temperatures to rise and ice in the polar regions of the Arctic and Antarctic to melt. Explain why we need this ice at the poles and name one negative result of its melting.



Planning to watch the event live? Write your question(s) for the presenter here:

## ***INFORMATIONAL RESOURCES***

Use these web articles and videos to provide background information to your learners on Antarctica and the wildlife that calls it home.

- Web page: [Polar Regions](#)
- Web page: [Penguin](#)
- Video: [Antarctic Ice From a Penguin's Point of View](#)
- Web page: [Species Spotlight: Emperor Penguin](#)
- Web article: [Tracking Adelie Penguins in Antarctica](#)
- Video/web article: [A Whale's Eye View of Antarctica](#)
- Web article: [The Whales of Antarctica](#)
- Web page: [Why Are Glaciers and Sea Ice Melting?](#)
- Web page: [Effects of Climate Change](#)

## ***HOW TO HELP***

- Web article: [Green Tips](#)
- Web article: [Fight Climate Change by Preventing Food Waste](#)



## ACTIVITIES

Check out these lesson plans to supplement the content from the event.

### [Climate change activities in polar bear toolkit](#)

Use lessons from the polar bear toolkit such as “What’s the Connection” and “Climate Trackers” to educate your learners on the impacts of climate change.

Grades 3–5



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### [Penguin craft](#)

Decorate a discarded toilet paper roll to resemble a penguin while discovering interesting facts about penguin species!

All ages



### [“Our Frozen Worlds” discussion guide](#)

The “Our Frozen Worlds” episode of the Netflix series *Our Planet* explains how climate change is affecting the fragile ecosystems of the poles. Use this discussion guide to further the conversation on Antarctica and its wildlife.

Grades 5–12



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### [WWF Together App: Penguin](#)

Use your smartphone or tablet to download the WWF Together app and check out the penguin feature. Learn all about penguins, engage with an interactive visual tool, and create a penguin origami craft.

All ages





## ASSESSMENTS

Conclude your lesson on Antarctica with these resources and fun assessment tools.

### [Habitat Spotlight: Antarctica collection on Kahoot!](#)

- Explore Antarctica
- All About Penguins
- Climate Change 101

### ***Life in a Frozen World: Antarctica worksheet***

Use the worksheet on the following page as an assignment or a quiz following the viewing of the *Conservation in the Classroom* event.

Answer key (for questions on the next page):

- 1) Southern
- 2) a
- 3) true
- 4) b
- 5) a & c
- 6) false
- 7) flippers
- 8) d





## Life in a Frozen World: Antarctica

Answer the following questions after learning about Antarctica and its wildlife.

1. What ocean surrounds Antarctica? \_\_\_\_\_

2. What do glaciers help scientists learn?
- a. How our Earth's climate has changed over time
  - b. What animals live on glaciers
  - c. How to get to the South Pole
  - d. What ships can travel through ice

3. True or False: Antarctica is considered a polar desert.

4. Which of the following is **NOT** happening in Antarctica as a result of climate change?
- a. Melting of glaciers
  - b. Decreasing of the temperature of the ocean
  - c. Weakening of food webs
  - d. Rising of sea levels

5. Why is sea ice important? (two answers)
- a. It provides feeding and resting grounds for animals.
  - b. It gives us products like medicine.
  - c. It keeps the Earth cool by reflecting the sun's energy.
  - d. It prevents oil spills.

6. True or False: Penguins and polar bears both live in Antarctica.

7. What have the wings of penguins evolved to be used as? \_\_\_\_\_

8. A penguin's black-and-white body helps it to \_\_\_\_\_.
- a. Find a mate
  - b. Swim
  - c. Control body temperature
  - d. Camouflage

9. Do you want to travel to Antarctica? Why or why not?

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10. Name one action you can take to help slow the effects of climate change and protect habitats like Antarctica.

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