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.

1. ___________________________  2. ___________________________  3. ___________________________

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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
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
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?
   __________________________________________________________________________________
   __________________________________________________________________________________

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