

MOUNTAINFILM FOR STUDENTS

A VERY SHORT GUIDE TO UNION GLACIER CAMP

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If you're considering an expedition to Antarctica, here is a jaunty preview of your likely base camp. Looks like fun! Not to mention beautiful and energetically staffed.



Standards

COMMON CORE ANCHOR STANDARDS FOR READING

CCSS.ELA-LITERACY.CCRA.R.1 / Key Ideas and Details

Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.

CCSS.ELA-LITERACY.CCRA.R.2 / Key Ideas and Details

Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.

CCSS.ELA-LITERACY.CCRA.R.7 / Integration of Knowledge and Ideas

Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.

CCSS.ELA-LITERACY.CCRA.R.8 / Integration of Knowledge and Ideas

Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence.

COMMON CORE ANCHOR STANDARDS FOR WRITING

CCSS.ELA-LITERACY.CCRA.W.7 / Research to Build and Present Knowledge

Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.

CCSS.ELA-LITERACY.CCRA.W.9 / Research to Build and Present Knowledge

Draw evidence from literary or informational texts to support analysis, reflection, and research.

Themes Antarctica, fun, exploration

Key Vocabulary camp, glacier, explorer

Pre-Screening Activity Grades K-2 & 3-6

Located in the Southern Ellsworth Mountains on the Union Glacier, Union Glacier Camp is the only one of it's kind on the continent of Antarctica. Prior to watching the film, locate Antarctica using <u>Google Earth</u>. When we think about how Antarctica is represented either on world maps or a globe, it is often either as a huge white swath along the lowermost quadrant of a map's rectangle, or is cut in half by the axis of a globe (further interrupted by the placement of the globe's base). Both representations are somewhat inaccurate in their depiction of the world's highest, driest, coldest, windiest and most remote continent.

Using Google Earth, first locate your classroom. Then search Union Glacier, Antarctica, Google Earth will "travel" or give a representation of the distance needed to travel from your location to Union Glacier, which is literally, one of the southernmost locations on earth! The camp itself is located 700 miles from the South Pole! You may have to watch this a few times, as it is hard to fathom how far away Union Glacier is.

After locating Union Glacier Camp, look at Mount Vinson, Antarctica's highest peak at 16,050 ft. The accompanying pictures of the mountain will help students gain a better understanding of Antarctica's rugged terrain. *National Geographic* has also created a 360 degree video titled **Journey Through the Ice** which follows a specially designed ship navigating Antarctic ice flows and showcases a group of curious penguins. You can move the screen 360 degrees to look back towards the ship, or to get an all-encompassing view of penguins.



Google Earth view of Antarctica

Pre-Screening Activity Grades K-2 & 3-6 (cont.)

Paul Nicklen, Canadian photographer, filmmaker, and marine biologist, has literally grown up in the arctic (he lived on Baffin Island as a child!) and has dedicated the past 20 years to documenting the beauty and plight of our planet. His 45-minute talk, titled <u>"Antarctica: A Virtual Reality Exploration</u>" is supplemented with one-of-a-kind videos, photographs and stories of the polar region. The entire video is well-worth the watch, as his personal stories of photographing whales, leopard seals, and penguins in Antarctica are humorous, and heartbreaking. However, if you do not have the time to commit to the full 45-minutes, the last 4 minutes of the film (starting at 42:00) is a short video that summarizes Antarctica's "threats, beauty, and why we must protect it."

If you would like to learn more about Antarctica and some "fun facts" check out <u>10-fun facts About Antarctica</u> from Aurora Expeditions. Did you know that from the South Pole every direction is considered North?

ANTARCTICA FAST FACTS!

- 1. Antarctica holds most of the world's fresh water
- 2. Antarctica is a desert.
- 3. Antarctica used to be as warm as Melbourne.
- 4. The Antarctic Peninsula is one of the most rapidly warming areas on Earth.
- 5. There is no Antarctic time zone.
- 6. Every way is north!
- 7. Antarctica has active volcanoes.
- 8. There's a subglacial lake that flows blood red.
- 9. Antartica has its own Treaty.
- 10. Diamond dust floats in the air.

Discussion Guide

GENERAL/OPEN PROMPTS

1. Would you like to visit Antarctica? Where are some places in the world you would like to visit? Why?

EXPLORING SELF

- 1. What do you think of life at Union Glacier Camp? Does this film make you want to visit? Why or why not?
- 2. What would you do to occupy your days at Union Glacier Camp? Would you do puzzles, ski or skydive? Or would you play volleyball, hulahoop, and work out in their gym? Do you think these activities would feel different in Antarctica? How and why?

EXPLORING THE WORLD

 The Antarctic Treaty was signed in 1959 and established Antarctica as a region for peace and cooperation. Do you think that world leaders should be required to visit Union Glacier Camp and stay in their accommodations? Why or why not? Would this requirement potentially change how countries interact with and support each other?

EXPLORING FILMMAKING

- 1. How do you think the aerial shots of Union Glacier Camp helped to tell the story of Union Glacier Camp?
- 2. Why do you think the filmmakers chose to make a film about the Union Glacier Camp?

EXPLORING SOCIAL ISSUES

1. Think of the people represented in A Very Short Guide to Union Glacier Camp. Do you feel like there were enough people of color represented?

SENSE OF WONDER

1. Antarctica is considered the last unspoiled continent and is 1½ times the size of the United States. The Madrid Protocol of the Antarctic Treaty sets aside Antarctica as a natural preserve. Do you feel like there are other places on earth that should be preserved in the same manner?



Activities

Grades K-2 & 3-6

The film provides the starting point for quite a few activities and directions you may choose to take with your class (depending upon their interest, current units of study and age group).

Since Antarctica is the location of the South Pole (and you most likely spent some time utilizing Google Earth prior to watching the film) *A Very Short Guide to Union Glacier Camp* may prompt a discussion on maps and directionality. These step-by-step directions to make a magnetic compass from the *BBC*, titled <u>"How to make a magnetic compass</u>" could be a great group (or individual) activity. Then use the compass to map the four directions within your classroom. From there, your class could label North, South, East and West in your classroom and find pictures (or student drawings) of Antarctica or the Union Glacier Camp to hang on the Southward wall. This activity could easily be extended throughout the school year as you learn about more places. You could continue to create representations of places or people and hang them below the appropriate direction on your classroom walls. In addition to this, you could further anchor student understanding of directions and maps by using the classroom map (or globe) to keep a visual record of the places and people you have learned about in relation to where your classroom is located.

How to Make a Magnetic Compass

What you need: A bowl of water, cork, sewing needle and a compass.



STEP 1: Rub needle 50 times along the magnetic strip on a fridge door. Make sure you do this in one direction only.



STEP 2: Place the now magnetised needle onto the piece of cork.



STEP 3: Gently place the needle and cork into the bowl of water.



STEP 4: The needle will turn and then come to a complete stop. It will be facing magnetic north. You can check this by placing the compass next to the bowl.

Activities

Grades K-2 & 3-6 (cont.)

This short film from *National Geographic*, titled <u>"He Grew Up in Antarctica--And Now He's Leaving"</u> shares the unique story of Dion Poncet, a man who is born and raised in Antarctica. However, as of 2019, Poncet has chosen to sell his vessel and leave Antarctica as he has seen the effects of climate change, commercial fishing and too many visitors on the landscape and its inhabitants.

The Union Glacier Camp is run by a group called Antarctic Logistics & Expeditions (ALE), which offers "air transportation, logistic support, and guided experiences for those venturing into the interior of Antarctica," with the "desire to share the white continent with other passionate explorers." ALE takes their impact on the environment extremely seriously, as all proposed activities must undergo an environmental impact assessment, and the camp itself follows strict-guidelines to limit their environmental impact. For example the camp is solar-powered, gray (waste) water is minimized, all garbage is removed from the continent, all human waste is removed, and all equipment is cleaned to prevent the introduction of diseases and alien species. In addition to this, they are members of the International Association of Antarctica Tour Operators (IAATO), which is a "member organization founded in 1991 to advocate and promote the practice of safe and environmentally responsible private-sector travel to the Antarctic." IAATO has "demonstrated through its work that environmentally responsible tourism is possible in remote and fragile wilderness areas" and that tourism is a driving force in Antarctic conservation, as they believe that "first-hand experiences foster a better understanding of a destination where no indigenous population exists to speak for itself." Written in February of 2020, this New York Times article by Paige McClanahan titled "Tourism in Antarctica: Edging Toward the (Risky) Mainstream," shares that over 56,000 tourists visited Antarctica during the 2018-2019 season. The article summarizes the unique obstacles the tourism industry in Antarctica faces, while discussing environmental impacts as well the regulations in place to help minimize impact.

After hearing the concerns of Poncet and learning the impacts of tourism on Antarctica from *The New York Times*, does the benefit of tourism outweigh its impacts? McClanahan summarizes in her article: "Antarctica is vital because it creates awareness and builds a network of people who will go home to fight for stronger protections in the region, but –as with scientific research, or any human activity in Antarctica –the risks and potential negative impacts of tourism must be weighed against its benefits." The class discussion could be anchored with a pros/cons chart, which could lead to a debate or paragraph writing (or both!). It could also lead students to research other areas impacted by tourism, and its positive and negative effects, to see if there are any similarities or differences to Antarctica's tourism industry.

Benefits of Tourism

Impacts of Tourism



Activities

Grades K-2 & 3-6 (cont.)

Want to learn more about Antarctica's unique explorers? ALE's website is a wealth of resources for learning more about different Polar (and Antarctic) explorers. For women-specific biographies, look to Ann Bancroft, Liv Arenson, Maria Klenova or Edith Ronne. For people-of-color specific biographies, look to Colonel Jatinder Kumar or Nobu Shirase. Some other diverse perspectives and profiles of people who have visited and explored Antarctica are George Gibbs who became the first African-American to set foot on Antarctica as part of an expedition in 1940. Lois Jones and her all-female science team made history as the first all-female research team to work for the U.S. Antarctic Program in 1969. Barbara Hillary is the only African American woman to have visited both the North and South Pole; in 2007 and 2011, respectively, at the ages of 75 and 79!

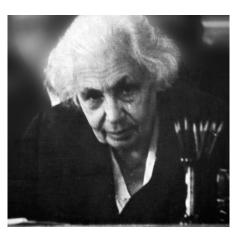
Students could choose which explorer they would like to learn more about, and then create posters (or digital posters) to commemorate them and share with the class. You could even <u>write a proposal</u> to have a place named in Antarctica after one of these people and submit it to the U.S. Geological Survey.



Ann Bancroft



Liv Arnesen



Maria Klenova



Edith "Jackie" Ronne



Col. Jatinder Kumar (JK) Bajaj



Nobu Shirase

RECOMMENDED EXTENTIONS

Since 2019 the Polar Impact Network has worked to illustrate the diversity of polar explorers, as well as facilitate discussions and provide community. The <u>"Features"</u> section on their website highlights interviews of diverse modern polar explorers.

<u>National Geographic's Resource Library for Antarctica</u> includes 49 resources all focused on Antarctica. There are a lot of great resources to inspire further learning.

Want to know more about Dion Poncet's childhood? This interview from the Guardian, titled <u>"A typical</u> day? Crawling out of a tent to find a fur seal staring at you" showcases Dion's mother, Sally Poncet and her reflections on a career in Antarctica.

REFERENCES

10 fun facts about Antarctica. Aurora Expeditions™. (2020, December 7). https://www.aurora-expeditions. com/blog/10-fun-facts-about-antarctica/.

Antarctica: A Virtual Reality Exploration. (2019). National Geographic Society. https://www. nationalgeographic.org/video/antarctica-virtual-reality-exploration/.

Barbara Hillary, first African American woman to reach the North POLE, dies at 88. Barbara Hillary (1931 - 2019). (2019, December 4). https://barbarahillary.com/barbara-hillary-first-african-american-woman-to-reach-the-north-pole-dies-at-88/.

BBC. (2019, September 5). *How to make a magnetic compass*. BBC Bitesize. https://www.bbc.co.uk/bitesize/topics/zrvbkqt/articles/zfb6pbk.

Frequently asked questions. IAATO. (2020, September 14). https://iaato.org/faqs/#.

Guardian News and Media. (2015, November 13). 'A typical DAY? Crawling out of a tent to find a fur SEAL staring at you'. The Guardian. https://www.theguardian.com/women-in-leadership/2015/nov/13/a-typical-day-crawling-out-of-a-tent-to-find-a-fur-seal-staring-at-you.

Lepp, A., Waldman, A., & Webster, S. (n.d.). Features. https://www.polarimpactnetwork.org/features.

Lucibella, M. (2019, October 14). *When women reached the ice*. The Antarctic Sun Science News. https://antarcticsun.usap.gov/features/4406.

McClanahan, P. (2020, February 26). *Tourism in Antarctica: Edging toward the (risky) Mainstream*. The New York Times. https://www.nytimes.com/2020/02/26/travel/antarctica-tourism-environment-safety.html.

National Geographic. (2016). 360° Antarctica - Journey Through The Ice. YouTube. https://www.youtube. com/watch?v=nywsA8wCCfY.

National Geographic. (2019). *He Grew Up in Antarctica – And Now He's Leaving. YouTube*. https://www.youtube.com/watch?v=2kx17K1Tlpk.

Polar explorers Archives. Antarctic Logistics & Expeditions. (2010, August 28). https://antarctic-logistics.com/ category/polar-explorers/.

Uenuma, F. (2019, February 27). George Washington Gibbs Jr. Defied danger and racism to become the First African-American to Visit antarctica. Smithsonian.com. https://www.smithsonianmag.com/history/george-washington-gibbs-jr-defied-danger-and-racism-become-first-african-american-visit-antarctica-180971568/.

