

Hungry Polar Bears

Grades 5-9

*Big Ideas of Sustainability: Limits, Ability to Make a Difference, Change over Time,
Long-term Effects, Interdependence*

Activity: In this activity, students will read the Newsela article, *Alaska villagers face dual threat of hungry polar bears, warmer weather*, and discuss its contents through a Socratic Seminar. A Socratic Seminar is a scholarly discussion of an essential question in which student opinions are shared, proven, refuted, and refined through dialogue with other students.

Environmental Facts:

Who: Polar bears are hunters whose primary food source are ring-necked seals. Polar bears wait patiently on the ice for a seal to come to the surface to breathe through holes in the ice, and then grab them through the ice. Polar bears also move quickly and can catch seals that haul themselves out on the ice.

Where: Polar Bears live in the icy northernmost parts of Canada, U.S (Alaska), Norway, and Russia.

Conflict:

- Due to rising temperatures, however, hunting on ice has become a problem for polar bears.
- In Alaska, sea ice has retreated past the continental shelf to waters that are too deep for Polar Bears. Polar bears are coming closer to villages as they search for new sources of food.

Essential Questions:

- What happens in a system when a system reaches its limits?
- How can we improve the future?
- How do your actions impact the future of other living things?

Socratic Seminar Fishbowl Format:

1. Divide your class in half.
2. Ask one group to position themselves as an inner circle. They will act as “discussants” first.
3. The other half of the class, seats in an outer circle, and acts as observers and coaches.
4. The teacher or seminar leader facilitates the discussion.

Essential Questions:

- What happens in a system when a system reaches its limits?
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You will need:

Computer Access to share the article below with your students:

[Alaska Villagers face dual threat of Hungry Polar Bears, Warmer Weather](#)

Time:

Two 45-minute class periods

1st Socratic Seminar should last about 30 minutes

Before the Activity:

- 1) Students should read the Newsela story: *Alaska Villagers face dual threat of Hungry Polar Bears, Warmer Weather* either as homework or in class.
- 2) Develop the essential or opening question for the discussion, or choose an essential question from those listed above.*
- 3) Provide adequate time for all students to record the essential question, develop their answer, and identify textual support for the answer. The essential question can also be assigned as homework the night before the Socratic Seminar.

Pre-Conference:

- 1) Prior to the seminar, the teacher will draw names to determine which students will be in the inner circle first and will assign each participant a coach from the outer circle.
- 2) Just before the seminar each participant and his or her coach will meet for a pre-conference to discuss the participant's goals for the discussion. The teacher will provide ample time for informal discussion between participants and their coaches in order to build some confidence in the participant's ideas before the seminar.

Activity Instructions:

- 1) Students sit in one of two circles (inner circle for participants, outer circle for coaches).
- 2) The essential or opening question is posed and explained if necessary.
- 3) Students respond to the question orally, cite evidence from text, ask questions, and add new insight or new knowledge from their point of view in regards to the opening question.
- 4) Notes for evaluative purposes are taken but there is no verbal or nonverbal feedback from the teacher during the Socratic Seminar. The teacher may ask follow-up questions, but these questions are infrequent and deliberate.
- 5) When the opening question has been thoroughly explored, students switch places.
- 6) A new question is asked after the students switch places.

Debrief and Reflection Questions:

- The main points and concepts are discussed and recorded
- Coaches and participants meet to discuss the strengths and weaknesses of their participation during the seminar.
- How was your understanding of the text affected by the ideas discussed during the Socratic Seminar?
- What evidence did you see of people actively listening during the Socratic Seminar?
- What might you do differently in the next Socratic Seminar?

* An effective opening question arises from genuine curiosity, has no single “right” answer, is framed to generate dialogue leading to greater understanding of the ideas in the text, and can best be answered by reference to the text.

Variations and Extensions:

- Coaches and participants should switch roles at some point during the Socratic Seminar
- Students can do further research on the effects of rising temperatures on wildlife.

On Education for Sustainability (EfS): *EfS provides students with opportunities to practice making interconnections between economic prosperity, environmental integrity, and social equity. The ability to integrate scientific reasoning, economic impact and social justice as a part of the decision-making process helps students to see how systems work and how their personal and collective actions have long/short term effects and unintended consequences.*

Bibliography

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Education for Sustainability finds the interconnections between economic prosperity, environmental integrity, and social equity. The ability to integrate scientific reasoning, economic impact and social justice as a part of the decision making process helps students to see how systems work and how actions taken can have long/short term consequences as well as unintended consequences.