

# Arctic

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Literature Focus Unit

EDU 315

# Literature Selection

## \* Fiction

- The Polar Express by Chris Van Allsburg
- Mama, Do You Love Me? By Barbara Josse
- The Polar Bear Son: An Inuit Tale By Lydia Dabovich
- Whale Snow By Annie Patterson
- Baby Baluga By Raffi
- The Magic School Bus in the Arctic  
By Joanna Cole and Bruce Degen
- Over in the Arctic: Where the Cold Winds Blow  
By Marianne Berkes and Jill Dubin
- Way Up in The Arctic By Jennifer Ward

## \* Nonfiction

- Arctic Lights, Arctic Nights by Debbie Miller
- Animals in the Arctic by Colleyan Mastin
- North Pole, South Pole  
By Nancy Smiler Levinson
- Living in the Arctic by Allan Fowler
- Building an Igloo By Ulli Steltzer
- North Pole, South Pole  
By Nancy Smiler Levinson and Diane Dawson Hearn
- Dk Eyewitness Books: Arctic and Antarctic

# Theme Study

- \* The thematic unit, that the students will be studying, will be on the Arctic. This unit will integrate reading and writing with social studies, science, mathematics, art, music and physical education.
- \* Students will develop an understanding of the Arctic, ecosystem, Northern lights, animals, shelter and survival, and pollution and global warming.

# Language Arts: Reading Activities

- \* 1.RI.9 Identify basic similarities in and differences between two texts on the same topic.
  - \* Students will read various fiction and nonfiction books and poetry about the Arctic. They will identify key differences between fiction and nonfiction.
- \* 1.RI.4 Ask and answer questions to help determine and clarify the meaning of words and phrases in a text.
  - \* Students will read about an animal of their choice and ask question specific questions about it to help clarify how they survive in the Arctic.
- \* 1.RI.2 Identify the main topic and retell details of a text.
  - \* Students will talk about their research about pollution in the Arctic and how it affects the environment.
  - \* Students will read aloud their research reports, poetry, and facts about the Arctic.

# Language Arts: Writing Activities

- \* 1.W.8 with guidance and support from adults, recall information from experiences and gather information from provided sources to answer a question.
  - \* They will write a research report about the Arctic and what their favorite thing about it is.
  - \* Students will write about the effects of pollution in the Arctic.
  - \* Once students have come up with the effects of pollution in the Arctic, they will write about a solution to the problem.
- \* 1.W.8 participate in shared research and writing projects
  - \* Students will write the temperature everyday outside and of a specific town they choose from the Arctic.
  - \* Students will come up with their own poems about the Arctic.

# Language Arts: Listening Activities

- 1.SL.1 Participate in collaborative conversations with diverse partners about Grade 1 topics and texts with peers and adults in small and large groups
  - \* The class will have a large group discussion about the effects of pollution on the animals in the Arctic, they will discuss solutions to change the amount of pollution.
  - \* Students will listen to each individual students presentation and ask questions to clear up any confusion.
  - \* Students will build on each others presentations and add comments.
  - \* Listen to their peers' reports, poems, facts, and other presentations.

# Language Arts: Speaking Activities

- 1.SL.4 Describe people, places, things, and events with relevant details, expressing ideas and feelings clearly.
  - \* Students will discuss the important details about the people that live in the Arctic.
  - \* Students will present their findings on what is happening to the ice in the Arctic, related to Global Warming.
- 1.SL.5 Add drawings and other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings.
  - \* Students will add pictures of the effects of pollution on the Arctic.
  - \* Students will present their research report to their peers.
  - \* Students will write to big companies cause pollution in the Arctic.

# Language Arts: Viewing Activities

- Students will view a PowerPoint on the Arctic.
  - <http://www.prometheanplanet.com/en-us/Resources/Item/233776/an-icy-morning-descriptive-writing-lesson>
- Students will look at maps and locate where The Arctic is located.
- Watch the movie clips from The Polar Express and clips from National Geographic on the Arctic.
  - <http://www.prometheanplanet.com/en-us/Resources/Item/45419/writing-with-figurative-language-from-the-polar-express>
  - Students will address differences between fiction and nonfiction events in the clips.
- Students will create their own word walls in their own binders.



# Language Arts: Visually Representing Activities

- Students will make a chart of different animals in the Arctic and where they are most commonly located, their habitat, weight, appearance, and diet.
- Students will make graphic organizers about what they think they know about the Arctic.
- Students will organize letters to words in the correct order on a large poster.
  - Students will add words to their word wall, all about The Arctic.
- Students will look over winter survival kit and discuss the importance of some items in the kit.
- Students will look over their math temperature graphs.
- Students will go through their trading cards about “Animals in the Arctic”.

# Science Activities

- 1-LS1-2 Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive.
  - \* Students will use the cutout and match of different babies with their mothers.
  - \* Students will discuss the things that the mothers do to help their babies survive.
- 1-LS1-1 Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.
  - \* Students will evaluate how polar bears use their fur to keep them warm, from the cold arctic weather.
  - \* Students will do a demonstration to show how the seals fat keeps them warm by placing hands in layers of fat then dipping their hands into ice cold water.
  - \* Students will create winter survival kits to show understanding of how stay warm in the Arctic.
  - \* Life in the Arctic Tundra: Students will identify different animals living in the Arctic and look over short descriptions of each animal.
    - \* Creating a spinner to match the example.
    - \* Create trading cards “Animals of the Arctic”.

# Mathematics Activities:

- 1.NBT.2 Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand that following are special cases:
  - \* A. 10 can be thought of as a bundle of ten ones – called a “ten”
    - \* Review what skip counting is and how to skip count by ten
    - \* Students will use the puzzle to understand skip counting by tens to figure out what each picture is.
- 1.MD.3 Tell and write time in hours and half-hours using analog and digital clocks.
  - Students will use the clock to tell what time it is in their classroom and also what time it is in the Arctic. They will keep the times in a journal each day.
- 1.MD.4 Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each categories, and how many more or less are in one category than in another.
  - \* Students will organize and record the temperature outside their school and also of a town in the Arctic. They will interpret data onto a graph. They will then show the differences between the temperatures everyday.
  - \* Students will organize and record the height and weight of Arctic Animals, into a graph.

# Social Studies Activities:

- 1.1.1 Identify basic components of maps and globes. (i.e., cardinal directions, maps key, symbols)
  - The students will locate the Arctic Circle on the map.
  - Students will discuss what direction the Arctic is from our current Location.
  - Discuss the Arctic being a desert. Differentiate between a cold desert and a warm desert.
- 1.3.1 Differentiate between wants and needs
  - The class will have a discussion on the type of weather they believe that they have there and how they should properly dress for the weather in the Arctic.
  - Students will create a winter survival kit and talk about appropriate weather clothing for different conditions.
- 1.6.1 Identify the similarities and differences (e.g., family members, clothes, food, style of homes, jobs, celebrations) among families around the world.
  - As a class, the students will read People of the Arctic, and make notes about the differences between their own lives and the people who live in the Arctic.
  - What is the food choice of the people living in the Arctic.

# Music and Art Activities

- 4.2.2 Know how expressive images cause different responses and communicate ideas.
  - Students will paint pictures of the Northern lights or scenery of the Arctic.
- 4.1.6 Use visual art materials and tools in a safe and responsible manner.
  - Students will make igloos out of marshmallows and frosting.
    - Students will discuss the different between present day shelters to igloo shelters.
    - The students will be using this model as a visual representation of an igloo.
      - Students will not be eating the igloos they make.
  - Students will make snow shoes out of cardboard and netting
- 4.1.5 Sing in groups
  - Students will sing Frosty The Snowman
- 4.6.2 Know variety of styles representing diverse cultures.
  - Listen to music of the Inuit People.
    - <https://www.youtube.com/watch?v=M1GUengQGAQ>

# Physical Education Activities

- S2.E3.1a. Differentiate between fast and slow speeds.
  - b. Differentiate between strong and light force.
    - Students will go out in the snow and make an igloo. The students will make a large enough igloo for the whole class to go inside of and see what it would be like to live in such a shelter.
      - How do people stay warm inside this kind of shelter?
    - Students will set up their desks as shelters and have a snow ball fight using paper.
    - Students will use their snow shoes to see what it is like to walk in the snow with them on.
    - Discuss different animal's walk and recreate them.
    - Go outside in appropriate and inappropriate weather clothing to learn about how to dress for outdoors.

# Technologies

- \* [www.scholastic.com/teachers/lesson-plan/magic-school-bus-arctic](http://www.scholastic.com/teachers/lesson-plan/magic-school-bus-arctic)
- \* [www.scholastic.com/teachers/lesson-plan/life-arctic-tundra](http://www.scholastic.com/teachers/lesson-plan/life-arctic-tundra)
- \* [www.polarbearsinernational.org/for-teachers/units-and-lessons/#units](http://www.polarbearsinernational.org/for-teachers/units-and-lessons/#units)
- \* [www.weatherchannel.com](http://www.weatherchannel.com)
- \* Interactive PowerPoint about the Arctic
  - \* <http://www.prometheanplanet.com/en-us/Resources/Item/233776/an-icy-morning-descriptive-writing-lesson>
  - \* <http://www.prometheanplanet.com/en-us/Resources/Item/45419/writing-with-figurative-language-from-the-polar-express>
- \* Audiobooks of specific literature on the Arctic
- \* <https://www.youtube.com/watch?v=M1GUengQGAQ>

# \* Language Arts Strategies

- Activate background knowledge – Students will think about prior knowledge they have about the Arctic.
- Connecting: Students make connections between texts and their personal experiences, world events, literature, and media.
- Evaluate: Students assess how well they're meeting the goals they set.
- Set Goals: Students identify why they're involved in an activity and what they hope to accomplish.
- Visualize: Students form pictures in their minds to make texts more vivid and easier to understand.
- Monitor – Students will ask themselves questions while reading different books about the Arctic and evaluate their own writing when they write in their journals.
- Observe – Students will observe the differences between the Arctic and their current location.
- Play with language – Students will use language creatively when creating their poems.



# Grouping Patterns

- \* Whole Class Groups: The whole class will work on projects together and listen to reading.
  - \* Students will listen to various books about the Arctic Read to them.
  - \* Students will add a temperature section in their calendar for the Arctic and current city to document each day together.
  - \* How do polar bears fur and seals fat keep them warm through the winter.
  - \* Calendar binder will also use to tell time in the Arctic and their current city.
  - \* Locate the Arctic circle on a globe and large map.
- \* Small Groups: Students will work in small groups of 3 to 4 people.
  - \* Students will read fiction and nonfiction books in small groups.
  - \* Write about pollution and come up with solutions.
  - \* Create trading cards of animals in the Arctic.
  - \* Create a graph of the height and weight of Arctic animals.
  - \* Students will create winter survival kits in their pods.
- \* Individuals: Students will work individually on projects and reading.
  - \* Read a nonfiction book about Arctic Animals.
  - \* Research report about their Arctic Animal.
  - \* Cutout and matching babies to their mothers.
  - \* Skip counting puzzles
  - \* Students will come up with a list of food they think people eat in the Arctic.

# Assessments

- \* Group assessment based on teachers observations
- \* Evaluate the students presentations and assignments using rubrics.
- \* Vocabulary tests will be done on all new words learned in this unit
- \* Participation; students need to show full participation in all activities that are done
- \* Portfolio of art work: puzzle, journals, graphs, data, and all other art work students would like to put in their portfolios.
- \* Journal Entires
- \* Check list for physical education skills.
- \* Compare and contrast chart
- \* 6+1 writing trait assessment for stories.
- \* Spelling test on the Arctic words

# Tentative Schedule

		Monday	Tuesday	Wednesday	Thursday	Friday
Morning	Language Arts	Reading to help identify similarities / differences	Students will listen to reading from the teacher about the Arctic	Writing the temperature outside everyday	Students will give presentations on what is happening to the Arctic ice	Students will watch clips on two different movies
	Music / Art	Students will sing frosty the snowman	Students will create snowman outside in the snow	Students will create snow shoes to walk in the snow.	Learn about igloos by creating them	Create and sing songs about polar animals
	Physical Education	Animal walking	Go outside without appropriate clothes and then winter clothes	Walk in the snow using their snowshoes	Go outside and create an igloo	Paper snowball fight inside the classroom
Afternoon	Mathematics	Students will review skip counting	Create puzzle while skip counting	Organize and record temperature data	Create a graph of the temperature data	Students will record differences in time
	Sciences	Use cutouts to match of babies and their mothers	Discussion of what mothers do for offspring	Learn about different animals that live in the Arctic	Learn how animals use their fat and fur	Create winter survival kits
	Social Studies	Locate the Arctic circle	Discuss the weather differences	How people in the Arctic deal with the weather	Discussion about differences people in the Arctic and how own lives	Discuss appropriate weather clothing