

Welcome to *If You Were a Penguin*

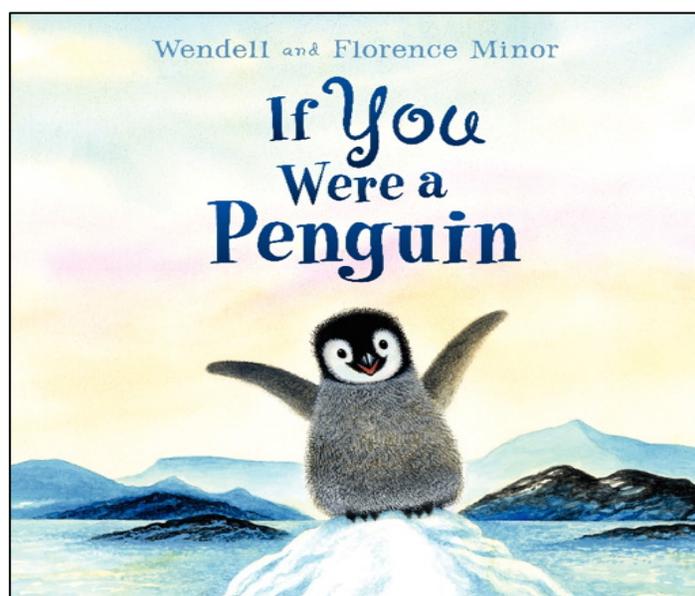


For the 4th Annual “One Book, Every Young Child” selection, we bring you **If You Were a Penguin** by husband and wife team Wendell and Florence Minor. Explore these fascinating birds in this informational picture book that makes learning and understanding facts lots of fun.

Some topics to explore with this book include:

- Adaptation
- Community
- Ecology
- Geology

This manual provides you with a starting point to further develop these themes and brings the book to life for you, the young children you work with, and their families. Use and adapt these suggestions to suit your own group, and let our ideas inspire you to create your own exciting lesson plans!



* Items marked with an asterisk contain small pieces and should not be used by a child under the age of three without adult supervision. Certain activities may require additional staff.

The templates mentioned in this manual can be located on the website under Resources and may be copied for educational use.

Acknowledgements

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Children's Museum of Pittsburgh
Pennsylvania Association for the Education of Young Children
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PennSERVE
Please Touch Museum
State Museum of Pennsylvania

Particular recognition is given to the Please Touch Museum in Philadelphia and the Children's Museum of Pittsburgh for developing this Activities Guide and the Traveling Trunk that can be used by the library and early learning communities. The museums have made an inspired selection of puppets,

games, music and suggested activities that support the collaboration's goal of providing opportunities to engage young children in interactive learning. Research shows that children learn more when they are actively engaged.

The Verizon Foundation is recognized and thanked for providing funding to enable every Head Start, Family Literacy, center and home-based childcare program in the Commonwealth to receive a copy of the book **If You Were a Penguin** by Wendell and Florence Minor and to learn about related activities that support the Pennsylvania Early Learning Standards.

—Susan Pannebaker, One Book, Every Young Child Coordinator

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Introduction by the Author, Florence Minor

My journey to becoming an author of children's books probably began long before I was even aware of it. As a very young child, one of my favorite pastimes was reading, and that love of reading continued to grow as the years went on. In fact, I recently realized that it was reading Heidi as a child that inspired me to travel to Switzerland after graduating from college, to see with my own eyes the beautiful Alps and landscape that I had imagined all those years before.

Writing has always been another favorite pastime. From writing compositions for school to writing letters to friends and family, and even keeping a dream diary, I always loved putting my thoughts on paper. And, in retrospect, I can see that many of those early compositions, and certainly the long letters I wrote, told stories.

Following graduation from college, my career path took some unlikely turns, although, in retrospect, they all led to the place where I am now, working with my husband Wendell to create books for young people. My years as a film editor for the news division of ABC television, helped hone my skills as an author, and as an editor of books.

Moving from Manhattan to rural Connecticut was the catalyst for my growing interest in children's books. Wendell had already been working in publishing for many years, and having left my film career behind in New York, I began to work with him in the studio. Handling the business end of the studio was certainly part of what I did, and still do, however, the creative aspect of helping to research, and edit Wendell's books, led to more and more of a full time involvement in our full collaboration on books.

Wendell's commitment to children's books stems in large part from the fact that his grade school years were not easy, because of his difficulty with reading. Then, as now, drawing and painting came easily to him, but reading skills developed later. Once they did, he found that history, biology and the natural world were among his favorites, and the books he creates for children today point to those interests.

Wendell and I share an awareness of the importance of books in the lives of young children, and since today's children spend so many hours on computers and video games, we want to share with them something that we feel very strongly about, which is good books.

We also share a love of the outdoors, and animals, and after spending any afternoon with my 4 year old niece, Adrianna, the idea for **If You Were a Penguin** was born. Adrianna told us how much she loved penguins, and it was then that we decided how much fun it would be to do a book about penguins for Adrianna's age group. We wanted to create a book that would be realistic in both imagery and text, to give children an idea of where the different species of penguins live, and some of the things they actually do. Knowing how many children struggle with reading, I used a simple, rhyming text that they would enjoy listening to, and hopefully be inspired to read on their own. Wendell then created appealing and humorous pictures that are also educational, since the images are based on real penguins.

It is a joy to help children to unlock the world around them through books, and making this our life's work is very fulfilling for Wendell, and for me. We both feel that the enjoyment of reading is the key to the future of every child, and we are dedicated to creating books that will entertain, teach, and inspire them.

Books by Wendell and Florence Minor

Art for the Written Word: Twenty-five Years of Book Cover Art, Harcourt, 1995.

Grand Canyon: Exploring a Natural Wonder, Blue Sky Press, 1998.

Pumpkin Heads!, Blue Sky Press, 2000.
 Christmas Tree!, Katherine Tegen Books, 2005.

Books Illustrated by Wendell Minor

Aldrin, Buzz. Reaching for the Moon, HarperCollins, 2005.
 Bates, Katharine Lee. America the Beautiful, Putnam, 2003
 Bunting, Eve. We Were There: A Nativity Story, Clarion, 2001.
 Bunting, Eve. Red Fox Running, Clarion, 1993.
 Burleigh, Robert. Into the Woods: John James Audubon Lives His Dream, Atheneum, 2003.
 Ehrlich, Amy. Rachel: The Story of Rachel Carson, Harcourt, 2003
 George, Jean Craighead. Everglades, HarperCollins, 1995.
 George, Jean Craighead. Fire Storm, Katherine Tegen Books, 2003
 George, Jean Craighead. Julie, HarperCollins, 1994.
 George, Jean Craighead. Julie's Wolf Pack, HarperCollins, 1997.
 George, Jean Craighead. Morning, Noon, and Night, HarperCollins, 1999.
 George, Jean Craighead. The Wolves are Back, Dutton, 2008.
 Johnston, Tony. Cat, What Is That?, HarperCollins, 2001
 London, Jack. The Call of the Wild, Atheneum, 1999.
 Siebert, Diane. Heartland, Crowell, 1989.
 Siebert, Diane. Mojave, Crowell, 1988.
 Siebert, Diane. Sierra, HarperCollins, 1991.
 Turner, Ann. Abe Lincoln Remembers, HarperCollins, 2001.
 Turner, Ann. Shaker Hearts, HarperCollins, 1997.
 Zolotow, Charlotte. The Seashore Book, HarperCollins, 1992.

If You Were a Penguin Activities

Fitting These Activities to Suit Your Needs

If You Were a Penguin Activities is divided into two main parts.

This first part, Fitting These Activities to Suit Your Needs, outlines some ways to fit these activities into your programs. Make it as extensive as a several-week interdisciplinary unit or as simple as an extra lesson to complement an existing program. Pick and choose activities based on type, or use a ready-made agenda, like those on pages 16 - 19.

Once you decide how to use the activities, find full procedures in the next part of this section, Activity Descriptions, beginning on page 20.

What Activities Do You Need When Working with?

Toddlers

- If You Are a Penguin (24)
- Penguin Cam (34)
- Penguin Exercise (50)
- Ice Migration (52)
- Songs and Fingerplays (54-56)

Preschoolers

- All activities are appropriate for preschoolers, reasonably adapted to suit your particular group.

School-Age Children

- What Do You Know about Penguins Chart (22)
- Fiction vs. Nonfiction (25-27)
- Mapping Penguins (30)
- Mounting an Antarctic Expedition (31-32)
- Climate Investigations (33)
- How Many Penguins? (38)
- Recognizing Each Other by Voice (40)
- Design Your Own Penguin (43)
- Community Music Making (47-48)
- Penguin Relay (51)
- If You Were a Penguin... Write or Draw About It! (59)

Types of Activities:

Station-Ready

- Climate Investigations* (33)
- Penguin Wall (36-37)
- Design Your Own Penguin (43)
- Black and White Collage (44)
- Costumes* (45)
- Shadow Puppet Theater* (46)
- Ice Migration (52)
- If You Were a Penguin... Write or Draw About It! (59)
- Make-Believe Toys (Miniature Penguins, in trunk)
- Sound Matching Boxes and Mini-Voice Recorder (in trunk, also 40)
- Puzzles and Board Games (in trunk)
- *Activities marked with an asterisk require adult supervision.

Large Group

- Reading the Book (22-27)
- Recognizing Each Other by Voice (40)
- Community Music Making (47-48)
- Penguin Exercise (50)
- Penguin Relay (51)
- Songs and Fingerplays (54-56)

Traveling Trunk

Reading the Book (21-27):

- Big Book copy and three hardback copies of *If You Were a Penguin*
- Reading related books/ Fiction vs. Nonfiction (25-27):
- Magloff, Lisa. *Penguin (Watch Me Grow)*. DK Press, 2007.
- Richardson, Justin. *And Tango Makes Three*. Simon & Schuster, 2005.
- Sierra, Judy. *Antarctic Antics: A Book of Penguin Poems*. Voyager Books, 2003.

Make-Believe Play Toys:

- Chinstrap Penguin
- Humboldt Penguin
- Emperor Penguin
- Sperm Whale
- Humpback Whale
- Killer Whale
- King Penguin
- South African Penguin
- Wooden Icebergs
- Rock Hopper Penguin
- Emperor Penguin Puppet
- Baby Emperor Penguin Puppet

Puzzles and Games:

- Penguin Floor Puzzle
- Wooden Puzzle
- Pengaloo*
- Hey! That's my Fish! *
- Pick-Up Penguins

Activities 29 and 30 use:

- Inflatable Globe

- World Map

Activities 19, 31 and 33 use:

- Thermometer
- Measuring Cup
- Insulator Materials (Various)

Activity 36 uses:

- Measuring Tape

Activity 40 uses:

- Electronic Voice Recorder
- Sound Matching Boxes

*Notice: Trunk components marked with an asterisk contain small pieces that may be a choking hazard. They should not be used unattended by children under the age of three.

If *You Were a Penguin* as a:

Story Time:

Here is a suggested agenda for a basic, one-hour **If *You Were a Penguin*** session. It includes a variety of activities (individual, large group, fine motor, large motor, and creative). Mix and match other activities within this format as your group's abilities and interests suggest.

- Read an Informational Picture Book (23)
- Fiction vs. Nonfiction (Parts II and III of 26-27)
- Costumes (45)
- Community Music Making (47-48)
- Penguin Exercise (50)
- Provide Copies of Templates Take-Home Activities (58-66)

Reading Series:

Here are some themed agendas to try as a reading series. Use all of them, pick one or two, or create your own with the activity lists on pages 13-15.

Introduction to Penguins

- What Do You Know about Penguins Chart (22)

- Read an Information Picture Book (23)
- If You Are a Penguin (24)
- Fiction vs. Nonfiction (25-27)
- Penguin Wall (36-37)
- Penguin Exercise (50)

Antarctic Exploration

- Mounting an Antarctic Expedition (31-32)
- South of the Equator—a Little Background Story (29)
- Mapping Penguins (30)
- Climate Investigations (33)
- Ice Migration (52)
- If You Were a Penguin... Write or Draw a Story about It! (59)
- Nonfiction Reading (74-75)

A Penguin Community

- Recognizing Each Other by Voice (40)
- Daddies of the Animal World (41)
- Costumes (45)
- Community Music Making (47-48)
- Penguin Relay (51)
- Additional Resources (74-77)

Penguin Spotting

- What Do You Know about Penguins Chart (22)
- Penguin Cam (34)
- How Many Penguins? (38)
- Design Your Own Penguin (43)
- Black and White Collage (44)
- Shadow Puppet Theater (46)

Activity Station

Themed activities can be arranged in stations that visitors attend in their own time or with little and sometimes no need for teacher direction. Stations provide more flexibility than a focused large-group, teacher-led sessions—allowing children to learn through play. To organize your own activity stations, first decide how they will be used by answering the following questions:

- * Will each/any station be staffed, and if so, by whom (regular staff/teachers, community volunteers, etc.?) Many of the activities require an adult to give directions and watch for safety. Be sure to choose activities that you can appropriately staff. You might even group

several related activities together at the same station under the supervision of one staff member. Keep the complexity of the activities and the expected number of visitors in mind as you plan.

* Will stations be visited on a voluntary basis, like booths at a carnival, or will people rotate from station to station on a timed schedule? In a school setting, a teacher might prefer a more structured rotation, while a carnival booth format would be useful in a public library or festival situation (see next page), where visitors may be coming in at different times and parents may be with children to help them pick and choose the activities they will do.

* Will stations be open at all times, or will there be a specific station visiting time? If stations will be open continuously, you will want to set them up in a separate area from the readings or group activities—if only the other end of a room—so that they are not distractions. If space is limited, start one station-type activity, perhaps a craft, with your small group after the readings, and set up other stations while the guests are busy with this first.

Once you decide how you want to use your stations, choose the activities that meet your needs. On page 14, you will find a list of station-ready activities.

*Those requiring staffing have been marked with an asterisk.

Penguin Festival

Host a Penguin Festival for a large community group by combining scheduled readings, large group activities, and stations visitors can attend in their own time. Bring in special guests, such as a local penguin expert, an Antarctic explorer, or a celebrity reader—maybe even Wendell and Florence Minor themselves!

Try highlighting the different climates of penguins in the way you set up the activity stations. Have visitors enter the room traveling farther south, from warmer to colder climates, as they go—as if they really were heading toward the South Pole! Here is an example, starting at the front of the room and moving back:

- A Warm Greeting: Near the entrance, set up a tropical Galapagos Island for refreshing snacks, recommended books, Take-Home Activities (58-66) and goodies.

- Arts and Crafts: Set up a slightly icy table next for activities like Design Your Own Penguin (43), Black and White Collage (43), and If You Were a Penguin... Write or Draw a Story about It! (59).
- Ice Floes and Open Water: Moving into the open waters set up pillows, gradually becoming wider apart, as described for Ice Migration (52). The open water can double as space for other large group active activities, such as the Penguin Relay (51), and the ice floes themselves can double as a comfortable space for listening to the story. When large group activities are not going on here, set up Costumes (45) so that visitors can hop the Ice Migration course and playact any other way they like.
- Penguin Wall: Moving farther south create a Penguin Wall (36-37) by marking the various penguin heights—so, that visitors can measure themselves next to the penguins in their own time.
- South Pole Research Station: In the far corner of the room, set the atmosphere by laying out white sheets of paper on the floor as the icy ground of the Antarctic. On top of this, set up a tent stocked with warm gear—including thermal sleeping bags, winter jackets, boots, gloves, and the like. Display maps, particularly of the Southern Hemisphere, on the walls and supply removable stick-on penguin pictures for the Mapping Penguins (30). Then stock a table with weather-sensing equipment and the materials for Climate Investigations (33) and set up a computer tuned in to one of the Penguin Cams (34).

Activity Descriptions

Activity Descriptions is divided into two main parts.

The first part includes the materials you need, the procedures you can use and the Early Childhood Standards that each activity covers. The activities are sorted by:

- Reading the Book
- Geography and Science
- Math and More Science
- Social-Emotional Science
- Creative and Performing Arts

- Active Activities
- Songs and Fingerplays

The second part of this section, Templates and Take-Home Activities, offers a variety of activities you can copy and send home, as well as stencils you can use for the activities already described in other sections. For each activity, there are open-ended questions to help you engage children more deeply in the learning experience. These questions are not a prescription, but are included to inspire your own questions.

Reading the Book

Good questioning while reading the book, and these additional reading activities, can help to broaden your reading experience.

What You Know about Penguins Chart

Creating a KWL chart helps to highlight the new discoveries you make when you read an informational book. Start by asking yourself the questions: What do you already know about penguins? What do you want to know about penguins? And what have you learned penguins? Seeing their words written down helps pre-readers strengthen the connection between spoken and written language.

Materials needed:

- Chalkboard, whiteboard, or easel paper
- Appropriate writing tool

Activity:

Divide a writing board into three sections, labeling each section with a K, a W, or a L.

As a group, brainstorm everything you already know about penguins. Write each suggestion in the K section of the chart. Be sure to include even the answers you might think are wrong. After the chart is completed you can go back and correct those points as needed.

Now ask the group “what do you want to know about penguins?” Write each answer in the W section of the chart.

After reading the story, complete the chart by asking the group “what have you learned penguins?” Write each answer in the L section of the chart.

Questions:

- What did we learn from the story? Have the group share their favorite new facts and write them in the L section of the chart.
- Then look at the W section. Can you answer these questions now?
- If so, write the answers in the L section.
- If not, ask where can we find these answers? Keep an eye out for the answers as you explore penguins further with your activities.

Standards:

AL1C Demonstrate growing eagerness and delight to learn about and discuss a growing range of topics, ideas, and tasks.

C 1.3E Identify facts in a selection

SC 3.2A Show curiosity by asking questions and seeking information

Reading an Informational Picture Book

If You Were a Penguin, unlike a typical picture book, is not written to tell a story with a beginning, middle, and end. It is nonfiction for preschoolers—written primarily to convey factual information. Approach it with a sense of discovery and exploration; learning new facts can be just as much fun as stories.

Materials needed:

- *If You Were a Penguin* (Big Book copy in the Traveling Trunk)

Activity:

Before the reading you may want to begin a What You Know about Penguins Chart (23) and introduce the book by asking the question: “If you were a penguin, what would you do?”

As you read show how the words and illustrations work together to convey information. On each page, ask the group to elaborate on the reading by explaining what is happening in the pictures.

After the story talk about the section of the book that is in rhyme and ends with the suggestion that the reader can do many of the things penguins do.

The book is not over yet—there are two more pages full of facts to explore. The first page is "Penguin Fun Facts." The second is "Do You Know Your Penguins?" a list, with pictures, of the ten species of penguins depicted in the book. You may want to refer to the second page while reading the facts on the first.

Questions:

- How do penguins fly underwater?
- What does it mean to sing a duet?
- What do you think these penguins are doing?
- What things in the story can you do?

Standards:

RL 1.6A Listen responsively to directions, stories and conversations

L 1.2C Respond and make connections to story events and characters by relating personal experiences

SC 3.3D Notice similarities and differences and categories of plants and animals

If You Are a Penguin

Can you be a penguin? Nothing engages an audience in a story like acting the tale out as you read.

Materials needed:

- If You Were a Penguin
- Open space
- Costumes (45), optional

Activity:

Read the story. This time, act out each page to the best of your ability. Then try it using Costumes (45).

Questions:

- Can you gather in a huddle with your friends all around?
- Can you pretend your fingers are a crown of fancy feathers?
- What other ways can you act out the story?

Standards:

RL 1.6 B Follow simple and multiple-step directions.

CA 9.3C Participate in teacher-guided dramatic activities

Fiction vs. Fact

Learning the difference between what is fact and what is made up is an important skill. It is also important, though, not to define fiction as "fake," "false," or other words with a connotation of wrongness. Instead, try positive words like "pretend" and "make-believe." Both facts and fantasy have a place—this activity will help children figure out what that place is.

Materials needed:

- A story about an anthropomorphic (human-like) penguin, such as the Tacky the Penguin books. See Additional Resources (76-77) for more suggestions.
- A fictional story about a more penguin-like penguin. See Additional Resources (76) for more suggestions.
- A book of penguin nonfiction. See Additional Resources (74-75) for more suggestions.

Activity:

Read parts or all of each type of book.

Questions:

- Which book is about a pretend penguin?
- Which book tells you facts about real penguins?
- Why might someone want to write/read a made-up, pretend story?
- Why might someone want to write/read a book of true facts?
- Why might someone combine the two, and make up a pretend story using real facts?
- What are some clues that a story is make-believe?
- What are some clues that a book is telling you facts?

Standards:

C 1.3F Differentiate between real and make-believe

L 1.2D Demonstrate an understanding that different forms of text have different purposes

Fiction vs. Fact, Part II: Pictures

Materials needed:

- A cartoon drawing of a penguin
- A realistic drawing of a penguin
- A photograph of a penguin

Activity:

Compare the three pictures.

Questions:

- How are the three pictures the same?
- How are they different?
- Which is closest to real?

Standards:

C 1.3F Differentiate between real and make-believe

CA 9.4E Recognize and name a variety of art forms.

Fiction vs. Fact, Part III: Comparison

Materials needed:

- Chalkboard, whiteboard, or easel paper, or copies of the chart on page 58
- Writing Instrument

Activity:

Make a Venn Diagram to compare real penguins with make-believe penguins. Templates can be located under the Resources section of the website.

Questions:

- What do real penguins eat?
- Where do real penguins live?
- What can make-believe penguins do that real penguins cannot do?
- How can you tell the difference between a real penguin in a story and a make-believe penguin?

Standards:

C 1.3 E Identify facts in a selection

C 1.3F Differentiate between real and make-believe

LM 2.6B Contribute data for simple graphs

SC 3.2 Compare, contrast and classify objects and data

Geography and Science

Explore the penguin world with these activities in geography and science.

South of the Equator—a Little Background Study

While all penguins live in the Southern Hemisphere, or south of the equator, they don't all live at the South Pole—in fact, no penguin lives on the Pole itself. With only four species of penguins, who call Antarctica home, other penguins live in South America, Africa, and Australia and even on the tropical Galapagos Islands!

Materials needed:

- Globe

Activities:

Start by finding Pennsylvania on a globe. Then ask the group to name faraway places they have been, and find those places on the globe. Now find the Southern Hemisphere on the globe—all penguins live only on this half of the Earth (except for the ones at zoos and the ones that play hockey in Pittsburgh).

About the Southern Hemisphere:

The Southern Hemisphere is not upside down. It looks like "down" on a globe, but in reality "down" just means toward the inside of the earth and "up" means farther away from the earth. You can walk in the Southern Hemisphere without falling off! The only time you would definitely notice something different in the Southern Hemisphere is at night; with the South facing different stars than the North—you would not recognize most of the constellations in the night sky.

Another difference from the Southern Hemisphere is that the seasons are opposite ours. When it is summer in Pennsylvania, it is winter in the Southern Hemisphere. When it is winter here, it is summer there! This is because the Earth is tilted compared to its orbit around the sun. During our summer, most of the sun's rays hit the Northern Hemisphere directly, but they come into the Southern Hemisphere at an angle and so don't warm as much. The opposite happens during our winters when the Southern Hemisphere celebrates summer.

Use this background discussion before the next two activities: Mapping Penguins (30) and Mounting an Antarctic Expedition (31).

Questions:

- Can you find the equator? Now find the Northern Hemisphere? And the Southern?
- What are the summer months for the Northern Hemisphere?
- What are the winter months for the Southern Hemisphere?

Standards:

SS 7.3F Describe the characteristics of where he/she lives and visits
 SS 7.3G Identify location and direction
 SS 7.3 H Develop a beginning understanding of maps as representations of actual places

Mapping Penguins

Learn a little more about southern geography to see all the places where penguins live.

Materials needed:

- A southern polar projection map
- A typical projection world map
- A globe
- Mini Penguins (62)

Activity:

Look at a typical map of the world and compare it to the globe. How is it the same? How is it different?

Now compare and contrast Antarctica as it appears on both the map and the globe.

Look at a polar projection map. How is this different from the other two maps? Why would you need different kinds of maps? Why is one map better or worse than the other map?

Glue the miniature pictures of each species of penguin to the polar projection map where that species. Use a nonfiction book with maps, the website www.siec.k12.in.us/west/proj/penguins/species.html, or another resource to find the locations.

Questions:

- Where on the map do the most kinds of penguins live?
- Why do the penguins live where they do?

Standards:

SC 3.3D Notice similarities and differences and categories of animals

- SS 7.3G Identify location and direction
SS 7.3H Develop a beginning understanding of maps as representations of actual places.

Mounting an Antarctic Expedition

Planning a trip to such an unusual and wild location such as Antarctica, calls for careful thinking about survival needs—such as traveling during the warmer January temperatures. (Remember the Southern Hemisphere is opposite of the Northern: their summer months are our winter ones.)

Materials:

- Background materials (a book or video about Antarctica)
- Writing board
- Suitcase Template (64) and crayons
- A suitcase and items to pack

Activity:

Introduce Antarctica with a book, such as *My Season with Penguins* by Sophie Webb, or a video, such as those found at the websites www.polardiscovery.who.edu or www.washingtonpost.com/wp-srv/science/interactives/antarctica/index.html.

Brainstorm as a group what equipment you would need to pack if you were going on an Antarctic Expedition. Here are three things to think about:

- It will be cold, even though you are going in the Antarctic “summer.”
- There are no stores in Antarctica. You have to take everything with you. Since that could be a lot, focus on what you need the most.
- Knowing that you cannot leave garbage behind, try to bring things in packages you do not have to throw out.

Try these ideas too:

- Keep track of all ideas on a chalkboard or easel.
- Have each child draw something to bring on the Suitcase Template (64).
- Pack a real suitcase with pictures of needed items, toy versions of items, or word cards of the items.

- Play “I’m Going to Antarctica and I’m Taking a...” Each person names a new item to bring as well as each of the items everyone who went before them is bringing.
- Combine any of the above.

Questions:

- Why would you want to go to Antarctica? What would you need to bring if you were going there?
- Think about why you are going to Antarctica. What will you need to help you do those things?
- What will you need to wear?
- What will you need to eat?
- What other equipment might you need?

Standards:

PH10.2A Demonstrate an awareness of healthy lifestyle practice.

SC 3.5A Understand changes in the environment, including weather and seasonal changes

SC 3.5E Show beginning understanding of how human activities may change the environment

SS 7.3F Describe the characteristics of where s/he lives and visits

Climate Investigations

Now that we have set up our base camp in Antarctica, we can study the local climate and learn how animals like penguins, and people, can stay warm in very cold places.

Materials needed:

- Reseal-able freezer bags (plain zip-locking bags; not ones with slider zips)
- Shortening, feathers, fake fur, foam packing peanuts, various scrap fabrics, and other possible insulators
- Ice or ice water in a large bowl or cooler
- At least two child-safe outdoor thermometers
- A chart for recording temperatures

Activity:

Set up your insulator bags ahead of time by filling a freezer bag about a third of the way with one of your insulation materials. Then carefully turn a second bag inside out and place it inside the first, lining up the zips to seal

the two bags together. Distribute the insulation material throughout—making a good barrier between the two bags. You may need to add some more and reseal the bags if there is not enough material to hide the inside bag from view. Reinforce the seal on the bags by stapling above the zip and securing with duct tape. Repeat with the rest of the insulators.

Put one hand inside an insulator bag and then put both hands in the ice water. What do you notice? Try this with each of the insulator bags in turn. Does one insulator work better than the others?

Now put a thermometer inside an insulator bag. Hold this bag down in the ice water, being certain to not let any water get inside the bag. At the same time place a thermometer directly into the ice water without a bag for a count of thirty. Then remove both thermometers and compare the readings. Are they the same or different? How can you tell which one is warmer and which one is colder? Try again with each of the other insulator bags. Keep track of the results on a chart.

Questions:

- How did the hand inside an insulator bag feel compared to your bare hand?
- Which of the bags worked the best?
- Why did the thermometers inside the bags show different temperatures than the one directly in the ice water?
- Which material do you think makes the best insulator in a cold climate?

Standards:

SC 3.2G Participate in scientific investigations

SC 3.4A Describe, compare, and categorize objects, based on their properties

This activity was adapted from one developed by Robin McRobert from the Department of Conservation Education at the Pittsburgh Zoo & PPG Aquarium.

Penguin Cam

Watch real penguins in action by connecting to the internet.

Materials needed:

- An internet-connected computer that can be viewed by all
- A writing board or easel for jotting down impressions.

Visit the:

Central Park Zoo at www.earthcam.com/usa/newyork/cpzoo

Feeding time is 10:30 am and 2:30 pm.

(Note: broadcast starts with an advertisement)

Monterey Bay Aquarium at

www.mbayaq.org/efc/efc_splash/splash_cam.aspx

Feeding time is 10:30 am Pacific Time or 1:30 pm EST.

Be sure to test your new penguin knowledge with The Penguin Quiz!

Tip: Try visiting each site that you will use before you schedule this activity! Both webcams require specific settings/programs to play properly; if the video does not work for you, click the "Having trouble...?" or "Cam Help" links to see what the requirements are and what changes you might need to make.

Even if you cannot tune in during feeding time, do not pass this activity up—penguins are always fun to watch and discuss.

Questions:

- How many penguins do you see? If possible, compare what you see at feeding time and at other times.
- What are they eating?
- What would you be doing right now if you were one of those penguins?
- What do you think the penguins are doing?
- What would it be like to be the penguin keeper?

Standards:

SC 3.3B Notice changes in living things over time

EL 1.6K Ask and answer relevant questions and share experiences individually and in groups

Math and More Science

These activities not only develop measuring, graphing and counting skills, they also help you discover more about the many varieties of penguins!

Penguin Wall

How big is a penguin? Many adults don't even know. That may be because there's no one answer—the seventeen species of penguin come in a variety of sizes!

Materials needed:

- Large piece of butcher paper, taped along a large blank wall
- Yard stick or tape measure
- Pictures of each species of penguin. See Penguin Cards (60-61).
- List of Penguin Heights (37)

Activity:

Name each species of penguin, showing each picture as available and reading how tall that penguin is. Then measure from the floor up the wall, having the group count by inches. Mark the height of the each penguin by attaching the appropriate picture on top. Draw a line or a basic penguin body shape to the floor.

Questions:

- Which is the tallest penguin? The shortest?
- How much taller (or shorter) are they?
- How many of the penguins are the same size?
- Measuring each child beside the penguins and marking their height ask, "Which penguin is closest to you in size?"
- How can you arrange the different kind of penguins according to size?

Standards:

LM 2.3B Develop an awareness of seriation through comparison attributes in everyday situations.

LM 2.8B Sort, categorize, classify, and order objects by one attribute

LM 2.6A Gather information about themselves and their surroundings

How Many Penguins?

After you have finished Mapping Penguins (30), look at the completed Penguin Wall (36) to do some counting and charting.

Materials needed:

- Easel paper
- Mini Penguins (62)
- Glue sticks

Activity:

Make a two column chart and label it "How Many Penguins?"

In the first column, list questions:

- ...are black and white?
- ...have colorful feathers?
- ...live in Antarctica?
- ...live in South America?
- ...live in Africa?
- ...are taller than the tallest child here?
- ...are shorter than the shortest child here?
- ...have long beaks?
- ...have short beaks?
- ...have white around their eyes?
- ...have black around their eyes?

Glue Mini Penguins (62) in the second column next to each question that they answer from the first column. You have now created a Pictograph. Count the pictures in each row to see how many penguins answer(s) each question.

Questions:

- What other questions can you add to the chart?
- How else can you show this information?
- What things do all penguins have in common?
- What other kind of charts can we make about penguins?

Standards:

LM 2.1B Count up to ten objects in meaningful context with emerging one-to-one correspondence

LM 2.8C Sort, categorize, classify, and order objects by more than one attribute

LM 2.6C Organize and display data on graphs using objects and pictures

SC 3.3D Notice similarities and differences and categories of plants and animals

Social-Emotional Science

These activities draw awareness to the ways people—and penguins—interact.

Recognizing Each Other by Voice

Penguins recognize each other by voice. Can you recognize your friends by the sound of their voices? This activity is good for groups that know each other.

Materials:

- Blindfolds (optional)
- Sound matching shakers from Traveling Trunk, optional
- Mini voice recorder from Traveling, optional

Activity:

Blindfold everyone, who is willing to participate, or have everyone put their heads down and cover their eyes. Tap one person on the shoulder. The tapped individual must say "I am a penguin!" while everyone else identifies who spoke based on voice recognition alone. Continue by choosing different children from around the room.

Alternate version: Choose one volunteer to be blindfolded or turned away from the group. Then just they will identify the person tapped. This puts more pressure on the individual to answer, but some might like to try.

Prerecord each child, and all the teachers, saying "I am a penguin!" Play back the recordings out of order to see if children can correctly identify the voices. They might even find it hard to recognize their own voices.

Questions:

- What was it like to have to figure out who was speaking without seeing them?
- How can you tell who someone is by their voice?
- Were some people easier to recognize than others? If so, why?
- How does the way one person speaks make them sound different from someone else?
- Was it harder to easier to recognize a recorded voice? Why?
-

Standards:

RL 1.6F Understand that communication occurs in different ways including various languages, devices, and gestures

PS 3.3G Cooperate in small and large group activities

SS 7.3A Identify similarities and differences of personal characteristics

Daddies of the Animal World

Penguin daddies are very involved in raising the baby penguins. Here are some other daddies from the animal world and what they do for their families.

Materials:

- Chart paper
- Pictures of things daddies do cut from magazines, optional

Activity:

Some facts to discuss:

- The Penguin dads are usually there when the eggs hatch; for most other birds it is usually the mom. In many species of fish, the daddy fish guards the eggs until they hatch, fighting off predators. A seahorse dad takes this one step further and keeps the eggs in a special pouch of his body until they hatch—like being pregnant.
- Penguins take turns watching the babies and going to get food. Most other birds have similar arrangements for catching food—the parents work together to find enough food for the babies.
- In mammals, the mom has to nurse or feed the babies, which takes a lot of time, energy, and food. So in many mammals, the dad brings food to the mom and babies, and guards them against attack from other animals.

Make a chart to compare the things animal daddies do with the things human daddies do—listing animal daddy behaviors on one side and human daddy behaviors on the other.

Make the chart more visual by find pictures of things that daddies do in magazines and paste them onto the chart.

Questions:

- What kinds of things do the human daddies do with their kids?
- If you were a daddy what would you do for your baby?

Standards:

SS 7.3D Shows understanding of how individuals work together to achieve group goals.

SC 3.3D Notice similarities and differences and categories of plants and animals.

Creative and Performing Arts

Put your imagination in action to bring penguins to life.

Design Your Own Penguin

Now that you know and understand what makes a penguin a penguin, put the information that you have learned to the test by designing a penguin species of your own.

Materials needed:

- Completed charts: Penguin Wall (36) and/or How Many Penguins (38) and/or Daddies of the Animal World (41)
- Drawing paper
- Crayons, markers, or colored pencils

Activity:

Review what all penguins have in common, then review all the ways penguins can be different. Can you imagine any more ways a penguin can be different?

Your job is to design a brand new kind of penguin. Here are some things to think about and questions to ask:

Questions:

- How big is your penguin?
- What kind of patterns or markings does it have?
- Where does it live?
- What is its favorite seafood?
- Does it have any colors besides black and white?
- What else makes your penguin special?
- What is its name?

Standards:

CA 9.1B Demonstrate the ability to represent experiences, thoughts, and ideas through the use of visual art forms

L 1.5B Use recognizable drawings to express thoughts, feelings, and ideas

SC 3.3D Notice similarities and differences and categories of plants and animals

Black and White Collage

The black and white coloring on a penguin is more than just a snazzy suit—the colors work together to camouflage penguins from predators as they

swim. Predators from above do not see the dark backs of the penguin against the dark water, and predators from below cannot spot the white bellies of the penguin against the bright sun above. Explore this effect with this activity.

Materials needed:

- Full sheets of black and white construction paper
- Black and white construction paper cut into a variety of shapes, strips, and sizes
- Glue stick
- A paper penguin cutout, black on one side (back) and white on the other (belly)

Activity:

Use black and white paper to create a design.

Demonstrate the way a penguin uses camouflage with the paper penguin. Show it swimming over a piece of black water paper, black back on top, then swimming against a white sky paper, white belly down. Compare—what would happen if a penguin swam on its back? Which penguin would be easier to see?

Challenge: We often draw with black on white paper, try switching it around by using white crayon or chalk on black paper.

Questions:

- What happens when you overlap different colored paper?
- What happens when you overlap same-colored paper?
- What happens when paper overlaps the same color in some places and the different color in others?
- What is easier to see: white on white, white on black, black on black, or black on white?
- How can you place your shapes so that you can see them best?
- How does placing a shape change the way your page looks?
- How might a penguin use its colors to hide?

Standards:

CA 9.4C Use the different elements of creative art
LM 2.8E Explain why and how objects are organized

Costumes

Become a penguin! Then act out the book or try Penguin Exercise (50).

Materials needed:

For the feather crown:

- Strips of black paper
- Orange, yellow, and black feathers
- Craft glue and/or a stapler

For the body:

- Paper grocery bags
- Black and white paint
- Paint brushes
- Scissors

Activity:

Crown Yourself Like a Royal (or Rockhopper, or Macaroni...) Penguin:

Glue or staple feathers around the black strip of paper. After the glue dries, wrap the strip around your head and staple at a comfortable size.

Flipper body:

(Adapted from: <http://childfun.com/index.php/activity-themes/animals/106-penguin-activity-theme.html?start=1>)

Place an open grocery bag upside down in front of you. The bag bottom will be your penguin shoulders, and the large blank side of the bag will be the penguin belly. Paint the bag black and white as desired (you probably want the belly white and the rest black, adding stripes, spots, and other details as you like). Let dry.

On the back, or the printed side of the bag, cut a slit from the open end and up to the bag bottom, and finish with a circle in the bag bottom that is big enough to be a neck hole.

On each side of the bag, cut a flipper-shaped flap; but be careful not to not cut the flap off. Put the bag on like an art smock, allowing your arms to make the flippers flap!

Questions to encourage playacting:

- What kind of penguin are you?
- What penguin-y things do you like to do?

Standards:

CA 9.1D Show care and persistence in a variety of art projects

CA 9.3 A Represent fantasy and real-life experiences through pretend play

PH 10.5D Demonstrate increasing control with writing and drawing implements

Shadow Puppet Theater

In a shadow puppet performance, the focus is not on the puppets themselves but on the shadows the puppets cast. This activity also allows you to create the very cool Antarctic setting using simple materials.

Materials needed:

- An overhead projector
- A glass or clear plastic bowl/dish
- Water with a lot of ice cubes or ice cubes alone
- Penguin Template (63)
- A projection screen or blank wall

Activity:

Create an Antarctic puppet theater.

Set up an overhead projector to project onto a screen or blank wall. Place the clear dish on the projector and fill with water and a lot of ice (remember that as the projector gets warm the ice will melt quickly.)

Use shadow puppets above the dish, and watch your penguins move around the ice!

Talk about shadows. How do they work?

Questions:

- What will your penguins do on the ice?
- Why do the shadows appear on the screen?
- Why does the ice turn into water?
- How does your icy background look different over time?

Standards:

CA 9.3D Express own ideas through dramatic play activities

SC 3.4C Explore, identify, and describe changes that occur over time

Community Music Making

Penguins belong to close communities and communicate through sound. If penguins could sing, they would probably like these two kinds of music. People (or penguins) sing different things, but those things sound better together than alone!

Materials:

- Selection of rounds and other multi-part songs on CD(s), optional
- An adult leader for each group of children

Activity:

Sing a Round (Singing the same thing but at different times)

A round is a kind of song where people sing the same thing but at different times. A famous, and relatively easy, round is "Row, Row, Row Your Boat." The trick is to start when it is your turn to start, but to pay attention to what you are singing and not what the other group is singing, because they will have started at a different time and will be singing something else! Have an adult carefully lead each group of children in singing their portion. Repeat the song as many times as there are groups.

Sing Another Way (Sing different things at the same time)

Make some penguin music. Each musical group of penguins will chant in a different rhythm.

- The first group dives into the water and finds a fish to eat, saying "Splash! Splash! Munch! Munch!"
- The second group runs across the ice and toboggans down a slope, saying "Waddlewaddlewaddlewaddle WHEEEEE!"
- The third group of penguins is having a chat, "Awk! Awk! Awk awk awk awk."

Gp 1: Splash! Splash! Munch! Munch!

Gp 2: Waddlewaddlewaddle WHEEEEEEEEEEE!

Gp 3: Awk! Awk! Awk awk awk awk

Questions:

- What does it sound like when we sing more than one thing at a time?
- What if one group sang faster than the other group?
- What if we were singing three different songs entirely?
- Why does singing different things sometimes sound nice and sometimes sound terrible?

Standards:

CA 9.2D Demonstrate ability to use movement and music

PS 3.3G Cooperate in small and large group activities

PS 3.31 Take turns in games and tasks

Active Activities

Get moving! These activities give you a workout, or at least keep you on your toes.

Penguin Exercise

This is more than a themed workout—it's a chance to build some new, active vocabulary verbs.

Materials needed:

- Large open area
- Up-tempo music (optional)

Activity:

Keep up an up-tempo beat as you lead the group in each of the following moves:

- Start with good penguin posture—stand up straight like a penguin!
- Waddle to a spot
- Toboggan on the ice
- Splash in the sea
- Fly through the water
- Dive for a fish
- Glide through the water
- Slither onto land
- Hop to your feet
- Leap across the ice
- Shuffle back to the group
- Huddle close to keep warm
- Go to sleep: standing up, sitting in water, lying down, or perched in a tree.

Make sure to use and demonstrate each move with fun, new action words.

Questions:

- How is moving like a penguin different from moving like a person?

Standards:

- CA 9.3C Participate in teacher-guided dramatic activities
- RL 1.6C Demonstrate increasing understanding of new vocabulary introduced in conversations, activities, stories or books.
- PH 10.4F Combine a sequence of large motor skills

Penguin Relay

Emperor Penguins keep their eggs warm by holding them on top of their feet, under their feathery tummies. Can you keep an egg on your feet?

Materials needed:

- Tape or chalk to mark a start and finish line
- Bean bags or small footballs

Activity:

Mark off two start/finish lines between three to five feet away from each other.

Divide the children into two or more teams. Have the first child in line for each team balance an "egg," small football or a bean bag, on his/her feet.

In order to keep the "egg" on top of his/her feet, you will want to encourage some slow and steady penguin shuffling. It is more important to keep the egg on safe on the feet than to reach the finish line first.

Once each child completes a lap they will pass the "egg" to the next person in line using just only their feet? (Penguins get to use their beaks too, but trying to use your nose might be even harder!)

Questions:

- What was it like to try to keep the egg on your feet as you moved?
- Did it help to move slowly or quickly?
- Did it help to use big steps or small steps?
- Can a penguin do anything you cannot do to help keep the egg on?

Standards:

PH 10.4B Exhibit developing balance, strength, and stamina

PH 10.4D Demonstrate coordination of body movements

Ice Migration

Penguins travel long distances to get from their nesting grounds, to the open water where they catch food, and back again. On the way they sometimes have to leap uneven ground and cracks in the ice. Luckily, penguins are excellent jumpers as well as swimmers. How well can your little penguins jump?

Materials needed:

- Several white pillows
- Many toy or cardboard cutout fish

Activity:

Set up pillows (preferably white, gray, or light blue) on the floor as an obstacle course. The pillows are ice floes, or floating chunks of ice, and the floor is the water. Jump from ice floe to ice floe to get to the open water. Then swim to catch a fish. Swim back. Then jump and bring the fish to your penguin baby.

Questions:

- Why do the penguins have to travel so far to get food?
- If you were a penguin, would you rather jump or swim and why?
- How do you think the penguins find their way?
- What foods do they catch in the water?

Standards:

PH 10.4A Demonstrate control of large body movements

PH 10.4C Demonstrate spatial awareness

Songs and Fingerplays

You can use these rhymes to open or conclude a reading of the story—or on their own.

Penguin Family

From <http://stepbystepcc.com/animals/penguin.html>

One royal penguin feeling very blue (hold up one finger)
 Called for his brother then there were two (hold up two fingers)
 Two royal penguins. . .swimming in the sea (swimming motion)
 Called for their sister then there were three (hold up three fingers)
 Three royal penguins waddle on the shore (waddle)
 Call for their mother, then there were four (hold up four fingers)
 Four royal penguins learning how to dive (Make diving motion)
 Call for their father, then there were five (hold up five fingers)

Penguin Cheer
(Sung to "The Ants Go Marching ")

From:

www.perpetualpreschool.com/preschool_themes/penguins/penguin_songs.htm

Penguins waddle all day long, Hurrah, Hurrah!
Penguins waddle all day long, Hurrah, Hurrah!
They only stop to take a swim and when they're done, they waddle again.
The penguins waddle around, around and round.

Standards:

CA 9.2D Demonstrate ability to use movement and music.
CA 9.3C Participate in teacher-guided dramatic activities

Have You Ever Seen A Penguin?
(Sung to " Have You Ever Seen a Lassie?")

From:

www.perpetualpreschool.com/preschool_themes/penguins/penguin_songs.htm

Have you ever seen a penguin? A penguin? A penguin?
Have you ever seen a penguin swim this way and that?
Swim this way and that way? And this way and that way?
Have you ever seen a penguin swim this way and that? (make swimming motions with arms)

. . . slide this way and that (make sliding motion with arms)
. . . waddle this way and that (feet close together, tiny waddling steps)
. . . flap this way and that (arms close to sides, flap little "wings")

Standards:

CA 9.2D Demonstrate ability to use movement and music.
CA 9.3C Participate in teacher-guided dramatic activities

Penguin March
(Sung to a military marching chant)

From:

www.perpetualpreschool.com/preschool_themes/penguins/penguin_songs.htm

[Group repeats each line after you as you sing]

I'm a penguin black and white,
I can't fly but that's all right.
I've got feathers that's not fur,
I lay eggs like other birds.

Penguins, 1, 2
Penguins, 3, 4
Penguins, 5, 6, 7, 8,
They're great!

I just swim to get my meals,
But I watch for leopard seals.
I'm from the south as you may know,
And now it's time for me to go.

Penguins, 1, 2
Penguins, 3, 4
Penguins, 5, 6, 7, 8,
They're great!

Standards:

CA 9.2D Demonstrate ability to use movement and music.
CA 9.3C Participate in teacher-guided dramatic activities
LM 2.1A Use counting and numbers as part of play

Templates and Take-Home Activities

Copy the pages located in the resource section of the website for the educational use of your organization. They include patterns for crafts and activities (some as described in the previous sections), activity sheets, parent information sheets to send home, and more.

If You Were a Penguin ... Write or Draw a Story about It!

If you were a penguin, what kind of penguin would you be?

How are you like that penguin?

How are you different?

What would you do if you were a penguin?

Sharing Informational Books as a Family

Nonfiction or factual books are not just for school reports; they are for making discoveries!

What interests your child? Want to know more about dinosaurs? Fascinated by cars and trucks? Loves dogs or horses or fish or penguins? Whatever the subject, there is an informational book for you!

Your librarian can help you find books that are not only fun to look at, but are full of new facts to learn about your favorite things.

- Are you or someone you know going on a faraway trip? Find a book that tells you more about that place!
- Did something on television catch your imagination? Pick up a book that tells you more about that subject!
- Have you encountered a new animal, discovered a new sport, met a famous person, or noticed something in your neighborhood you have never noticed before? There is a book for that, too!

The world is full of new things to explore. Informational books can help you and your curious child to dive right in.

Tips for Family Reading at Home

1. Set aside time for reading every day. Pick a time that works best for you and your child. Many children like a story before bed, but story time happen any time of day. Some children may not want to sit still for a story, so work in a story with another routine—during bath time or snack time. But whenever you choose to read, make it a habit!

2. Choose stories that both you and your child will enjoy. Your child will probably like stories with rhymes, repeated refrains, pictures to identify, and other interactive details. But if you enjoy the story too, your enthusiasm will show, giving story time a happy energy that your child will grow to appreciate.

3. Don't be afraid to be silly! Give characters funny voices, be melodramatic, and change the words of a familiar story to something unexpected! You do

not have to be a great actor to tell the story, but if children see you having fun with a story, they learn that stories are fun!

4. Encourage your child to participate. Let your child predict what happens next in an unfamiliar story, and tell portions of the story themselves in a familiar one. Ask your child to identify the pictures in a book or to describe what they think is happening.

5. Be a reading role model. Let your child see you pick up a book or magazine and read for your own benefit. Show your child how reading helps you find out things, like what ingredients go into dinner and what time a favorite movie is going to be on television. Model good book handling, and give books their own special places in the house.

For more ideas and information, please visit The Pennsylvania Center for the Book at www.pabook.libraries.psu.edu/familylit/ and the Family Reading Partnership at www.familyreading.org/

Activities by Standards

Pennsylvania Learning Standards for Early Childhood:
Pre-Kindergarten (2007)

Key Learning Area: Approaches to Learning

Standard AL 1: Initiative and Curiosity

Standard AL 2: Engagement and Persistence

Standard AL 3: Reasoning and Problem Solving

Standard AL 4: Flexibility, Risk Taking, and Responsibility

Standard AL 5: Imagination, Creativity and Invention

What You Know about Penguins Chart (22)

Mounting an Antarctic Expedition (31-32)

Key Learning Area: Creative Arts

Standard CA 9.1: Use a Variety of Visual Art Forms for Expression and Representation

Standard CA 9.2: Express Self through Movement & Music

Standard CA 3: Participate in Dramatic Play

Standard CA 4: Appreciation of a Variety of Art Forms

Fiction vs. Nonfiction part II: pictures (26)

Design Your Own Penguin (43)

Black and White Collage (44)

Costumes (45)

Shadow Puppet Theater (46)

Community Music Making (47-48)

Songs and Fingerplays (54-56)

Key Learning Area: Language and Literacy

Standard: Receptive Language

Standard: Expressive Language

Standard: Comprehension

Standard: Literacy

What You Know about Penguins Chart (22)

Reading the Book (23)

Fiction vs. Nonfiction (25-27)

Recognizing Each Other By Voice (40)

Community Music Making (47-48)

Penguin Exercise (50)

Songs and Fingerplays (54-56)

If You Were a Penguin ... Write or Draw a Story about It! (59)

Key Learning Area: Logical-Mathematical

Standard LM 2.1: Numbers, Numerical Representation and Numerical Operations

Standard LM 2.8: Understand Patterns, Relations and Functions

Standard LM 2.9: Concepts of Space and Shape

Standard LM 2.3: Measurement Concepts

Standard LM 2.6: Represent and Interpret Data

Standard LM 2.5: Reason, Predict and Problem Solve

Fiction vs. Nonfiction part III: Comparison (27)

Mapping Penguins (30)

Climate Investigations (33)

Penguin Wall (36)

How Many Penguins? (38)

Black and White Collage (44)
Community Music Making (47-48)

Key Learning Area: Personal Social
Standard PS 3.1: Self Concept
Standard PS 3.2: Self Regulation
Standard PS 3.4: Self Care and Self Reliance
Standard PS 3.3: Social Interactions

Mounting an Antarctic Expedition (31)
Penguin Wall (36)
Recognizing Each Other by Voice (40)
Costumes (45)
Community Music Making (47-48)
Penguin Exercise (50)
If You Were a Penguin ... Write or Draw a Story about It! (59)

Key Learning Area: Physical - Health
Standard PH 10.4: Gross Motor Coordination
Standard PH 10.5: Fine Motor Control
Standard PH 10.1-10.3: Health and Safe Practices

If You Are a Penguin (24)
Mounting an Antarctic Exploration (31-32)
Climate Investigations (33)
Design Your Own Penguin (43)
Black and White Collage (44)
Costumes (45)
Penguin Exercise (50)
Penguin Relay (51)
Ice Migration (52)
Songs and Fingerplays (54-56)

Key Learning Area: Program Partnerships
Standard PP 1: Help Parents Advance Child's Learning
Standard PP 2: Connecting Parents with Community Services
Standard PP 3: Helping Parents Transition their Children
Standard PP 4: Parents and Program Governance

Penguin Festival (19)
Take-Home Activities (57-64)
Reading Tips (65-66)

Key Learning Area: Science

Standard SC 3.2: Scientific Inquiry
 Standard SC 3.3 Living Things
 Standard SC 3.4: Physical World
 Standard SC 3.5: Earth and Space

South of the Equator (29)
 Mounting an Antarctic Expedition (31-32)
 Climate Investigations (33)
 Penguin Cam (34)
 How Many Penguins? (38)
 Design Your Own Penguin (43)
 Shadow Puppet Theater (46)
 Penguin Relay (51)
 Ice Migration (52)

Key Learning Area: Social Studies
 Standard SS 7.3: Community
 Standard SS 8.1: Past, Present and Future
 Standard SS 6.1: The Role of Consumers

South of the Equator (29)
 Mapping Penguins (30)
 Mounting an Antarctic Expedition (31-32)
 Penguin Cam (34)
 Recognizing Each Other by Voice (40)
 Daddies of the Animal World (41)
 Community Music Making (47-48)

Additional Resources

Websites

Teacher resources:

www.siec.k12.in.us/west/proj/penguins/main.html

Nice, well-organized teacher focused site, with lesson plans and reference ideas as well as online fun for school-aged children. Check out the great interactive habitat map.

www.kidzone.ws/animals/penguins/index.htm

Printable activity sheets and links for teachers. Check out the link to the online penguin jigsaw puzzles.

www.enchantedlearning.com/subjects/birds/printouts/penguins.shtml

Printable coloring sheets of several different penguin species and additional links.

www.canteach.ca/elementary/songspoems25.html

An extensive collection of penguin poems and songs.

<http://childfun.com/modules.php?name=News&file=article&sid=80>

Crafts, activities, experiments, snacks, and songs on the topic of penguins.

www.perpetualpreschool.com/preschool_themes/penguins/penguins.htm

Penguin activities submitted by preschool teachers, including songs, experiments, snacks, games, and crafts.

General Penguin Reference

www.seaworld.org/animal-info/info-books/penguin/index.htm

Any fact you need about penguins you may find here, well organized in outline form. Not as kid-friendly as you would expect from a SeaWorld site, but definitely a good reference source.

www.livescience.com/penguins/

A site dedicated as a source of news articles and informational tidbits moderated by scientists. A good reference source for up-to-the-minute information.

<http://kids.nationalgeographic.com/Animals/CreatureFeature/Emperor-penguin> and

<http://kids.nationalgeographic.com/Animals/CreatureFeature/Adelie-penguin>

Interactive kid-oriented site, with pictures, facts, maps, and videos about these two penguins.

Antarctic Reference

<http://polardiscovery.whoi.edu/index.html>

This site has everything—great photos, maps, games, reference information, and news from polar explorers. Links for us to follow: Expedition 3 (Penguins and Lava Flows) under “Live from the Poles”; everything in the “Antarctica: Frozen Continent” section; and much in “Compare the Poles” that really show the differences between the Arctic and Antarctic. If you only check out one of these websites, this is the one.

<http://beyondpenguins.nsd.org/>

A webzine directed at teachers that covers all aspects of the Polar Regions: careful - this includes the Arctic! Don't get confused when looking for Antarctic information! With that said, check out the great articles in the first issue on correcting misconceptions about the differences between Arctic and Antarctic life.

www.ipy.org/

The International Polar Year project was a large scientific program of studies on polar issues. The "year" was scheduled from March 2007-March 2009, but the site still shows really cool pictures and up-to-the-minute information about what real scientists are doing right now.

www.antarcticconnection.com/company/information/index.shtml

This web-based company specializes in selling products related to Antarctica and Antarctic exploration, but also maintains a wide variety of information and news about all things Antarctic, including the penguins.

www.doc.ic.ac.uk/~kpt/terraquest/va/science/penguins/penguins.html

Take a virtual expedition to Antarctica and learn facts as you go.

Live Penguin Cam

www.earthcam.com/usa/newyork/cpzoo/

Live penguins at the Central Park Zoo. Feeding time is 10:30 am and 2:30 pm. (note: broadcast starts with an advertisement).

www.mbayaq.org/efc/efc_splash/splash_cam.aspx

Live Penguins at the Monterey Bay Aquarium. Feeding time is 10:30 am Pacific Time or 1:30 pm EST.

Additional Articles

Sharing Informational Picture Books with Children
Georgene DeFilippo, Youth Services Coordinator, Carnegie Library of
Pittsburgh

In this age of information, what better way to learn new things about what interests you than through a book? Informational books have a unique motivating potential; they can serve as a springboard for learning new things in an exciting way. Children are curious about the world around them and they want to know the how's, why's, where's and when's. Brightly colored illustrations or photographs capture a child's attention and can take them on a journey under the sea, into the earth, or high above the trees.

Young children are naturally full of questions, and informational books can provide some of the answers. From cover to cover the child can explore his/her greatest interest in an informal and playful way. Many recently published informational books are written specifically for young children, even the youngest preschoolers can find titles that are age appropriate. From the first turn of the page the illustrator captures their interest and engages their mind. Slowly, children build on their background knowledge and comprehension of the concept. Quality informational books expand their vocabulary and understanding for later discovery and learning.

Having books readily available increases a child's likelihood of reading, and frequent reading is a strong predictor of later reading achievement (Anderson, Wilson, & Fielding, 1988). Many children enjoy informational books much more than narrative stories, and will be more willing to read an informational book if it is about something that interests them. Teachers and parents have the opportunity to build more conversation around an informational book. Informational books invite children to discover the world around them and navigate a text structure different from narrative. Using informational books allows children to learn book features (glossary, maps, diagrams, index) that are not present in narrative, build on their comprehension skills, develop and expand their vocabulary, and motivate them to want to read more.

So gather a group of young children around you and discover how to "fly underwater" and "eat squid and fishes without any dishes." Learn about penguins who live on the beach and on the ice, and that Macaroni is not just to eat!

Antarctic Exploration Article:

A Visit to the "End of the World"

Allan Marshall, Curator of Aquatic Life at Pittsburgh Zoo & PPG Aquarium

I have been fortunate enough to visit many places around the world to see marine animals in their natural environment. The last place on my list was Antarctica and when I got the invitation to be a naturalist on board a ship and provide education programs via satellite communications to schools around the world, I snatched it up eagerly. Being a marine biologist, I knew that if I went there, I would have to get in the water and see what goes on beneath the surface. We flew into Ushuaia at the southern tip of South America to board the ship headed to the Antarctic Peninsula. As fate would have it, the ship had an engine problem and we couldn't go. So close, but

we weren't going!?! 110 people had their hearts set on seeing penguins, whales and seals and now we were denied.

I've never been a person to accept defeat. We found out where we could see penguins and other wildlife in the Beagle Channel, near Ushuaia, then we found boats that could take us, and we went to see everything that we could. I went diving in water that was only a few degrees above freezing, much the same as Antarctica, and had penguins and South American Sea Lions "flying" all around me while I marveled at the other strange and bizarre animals that call this chilly water home. We also took passengers from the ship to a small, remote island that has colonies of both Magellanic and Gentoo Penguins and were able to walk carefully among the birds while they looked at us wondering what the weird, tall animals were in their midst. In public aquariums, Gentoo Penguins have orange bills. These bird's bills were bright red due to the foods they eat. They were magnificent in comparison! We were also very fortunate to witness a spectacle seen by very few. A huge Leopard Seal was cruising just offshore from the island. He had just caught a penguin (their favorite food) and was tearing it apart to eat it. While we were all very sad to see a penguin lost, it was a very strong reminder that life in these frigid waters is always fraught with danger.

At the time we were to set sail for the Antarctic Peninsula, there was a storm that had 60-knot winds and 50-foot high waves churning the Southern Ocean. Perhaps it was a good thing that we didn't leave that day. Our disappointment turned to fascination as we witnessed these amazing penguins living their lives in such harsh conditions. Their comical waddle on land is such a contrast to how sleek and graceful they are when they hit the water. It is an experience I will never forget, but will use to ensure that my next attempt at the Great Southern Land is successful and even more exhilarating in the land of snow, ice and, of course, penguins.