



Polar Ice Cap Playground Learning Guide



Everyone head for the Polar Ice Cap!

Geared for 2-5 year olds, this section of the playground is a perfect place for integrating discussions about polar ecosystems and various animal adaptations, and— of course— for imaginative free play! Below, you'll find information about the polar regions and some ways to explore this awesome area.

Background

The Arctic and Antarctic— otherwise known as the North and South Poles, respectively— are the coldest habitats in the world. Antarctica is an ice covered continent whereas the Arctic is made up of pack ice and glaciers floating on the partly frozen ocean. Glaciers are masses of snow on land, built up to become large ice masses over hundreds and thousands of years. When a chunk of this glacier breaks off and floats in the water, it is known as an iceberg.

Fewer animal species live in the Antarctic than in the Arctic. Some of these area's animal inhabitants only live in the polar regions part of the year, migrating to warmer, lower latitudes during the winter months. Others live in the frozen habitats year-round, most of which have special adaptations that allow them to survive the extreme cold of the regions. (Remember: Polar bears only live in the Northern Hemisphere and penguins only live in the Southern Hemisphere.)

Adaptation Activities

- What would the Arctic ocean feel like? What would make you warmer?
- How far away could you swim if you had to surface to breathe every two minutes? Every twenty minutes? Every hour?
- If you lived on the 'land' (ice and snow) what colors would help you blend in? What if you lived in the water?

Act out animal movements!

Try moving around the Polar Ice Cap area without 'falling in' the 'ocean'. Shuffle like a polar bear; slide like a seal.

Words to Learn

Glacier: slowly moving mass of ice on land formed by the accumulation and compaction of snow

Ice Cap: an extensive cover of ice and snow that spreads out from a center and covers a large area of land and water

Permafrost: permanently frozen subsurface layer of soil occurring throughout the polar regions

Earth Concern

Climate change is affecting the polar regions— warmer temperatures and melting ice impacts animals' habitats and food sources.

How You Can Help!

You can use less energy in your own home. Turning off lights, unplugging chargers when you aren't using them, and playing outside instead of watching TV are all ways to reduce energy use.

Critical Thinking

- Our Polar Ice Cap play area was modeled after the Arctic/North Pole. How do you think it would be different if it were modeled after the Antarctic?
- Many of the animals that live in polar environments are well-suited for life on land as well as being great swimmers— why do you think that is true?

Sculpture Connection!

Look for these polar critters in the Sculpture Learning Plaza!

Horned puffin

Arctic hare

Gray whale

