

Writing Prompt: Think about all the ways that polar bears have adjusted to living in the arctic. Which are some adaptations that have allowed the polar bear to survive in the arctic?

Polar Bears

Polar bears are amazing. We are not talking about story book polar bears now. These incredibly huge, animals live in some of the most difficult place on Earth. Imagine living in temperatures that can drop as low as -50°F! Polar bears have evolved over time to be able to live in the bitter cold Arctic. Just by looking at them, you can see several body parts that enable them to handle very cold temperatures.

A polar bear's color can range from a butter cream yellow to a very pure white. Appearing white like its snowy surroundings can camouflage the polar bear. This camouflage protects it from some of the most dangerous predators. But, you will be surprised to hear that polar bear's skin is actually black. I saw a black polar bear at the zoo. The source I read said black polar bears are uncommon.

You know how it's warmer for you to layer clothing on a cold day. Well it's the same for a polar bear. Two coats cover a polar bear's black skin to protect it from the cold. There's a clear, soft, fuzzy undercoat of fur, which rests against the skin. And on top of the undercoat, is a thick covering of long, stiff guard hairs, which also are colorless – like tiny, clear plastic straws. The fur only appears white because it reflects sun light. The fuzzy coat traps air next to the skin, while the guard hairs help to repel water. There's another layer of protection that you can't see. A thick layer of blubber that is one to four and a half inches is just beneath the skin. The blubber covers all the bear's muscles. Blubber is a layer of fat that acts as a blanket to hold in the bear's body heat.

Large paws, measuring up to one foot across, support and help spread the polar bear's weight across the ice. Its black footpads are dotted in tiny bumps called papillae. Around the toes and footpads is thick fur. The toes end with strong claws. The papillae, fur and claws all give the polar great traction on the ice. As you can see, a polar bear's paws are like snow shoes!

From: Discovery Kids