

Name _____

Science Surprises

PENGUINS



Did you know? Penguins have a fatty undercoat that keeps them warm!

The outer fur and feathers of animals help **insulate** their bodies. **Insulate** means to keep the heat from leaving their bodies. Penguins have feathers, but they need more insulation because it's so cold in the Antarctic, where they live. So, they have an extra layer of thick fat, called **blubber**, under their skin.

Heat moves from a warmer place to a colder place. If the penguin didn't have **blubber**, the heat from its body would move toward the cold air outside. The **blubber** stops the heat from moving away from the penguin's body.

Did you know that male emperor penguins carry the egg laid by the female by holding it on their feet? A skin flap on his belly keeps the egg from falling off. The egg will stay on its father's feet for about two months during the cold, windy Antarctic winter. While he's egg-sitting, the male penguin doesn't eat. The female swims in the cold ocean and eats **krill**, small animals sort of like shrimp.

1. What is blubber? _____

2. What does insulate mean? _____

3. Who takes care of the emperor penguin egg until it hatches? _____
