

How Does a Polar Bear Stay Warm?

The Science Behind the Experiment - A Guide for Adults

Polar bears have thicker skin than us. In this experiment we have used the first plastic glove to show this, this simple layer is much more effective in keeping the cold out than our skin. Secondly, polar bear fur is also covered in oils which make it almost waterproof, the plastic gloves in our experiment act as a waterproof layer, just like the oils do on a polar bear. Their fur is hollow and traps lots of air. Air is an excellent insulator against the cold and protects the polar bear from becoming cold. The air between the first and second glove shows us this in our experiment.

Science Experiment

How Does a Polar Bear Stay Warm?

Can you put your hand into the ice water? How does it feel?

Now put a plastic glove on your hand and place it in the ice water.

Does that feel any different to before you put the glove on?

Next, add a second glove and trap some air inside. Place your hand into the ice water. How does it feel?