

## Polar Bear Mittens

### Materials:

- Ice water
- Shortening
- Two medium sized sandwich bags
- One big sandwich bag
- 3 Thick rubber bands
- Towels

### How to:

Fill both of your sandwich bags half full with shortening and zip them up tight. Put one sandwich bag on top of the other like a sandwich. Pull one rubber band over both of the sandwich bags near the bottom, and put a rubber band on near the top. Next, put them in the bigger sandwich bag, but don't zip it up.

Get your ice water ready. Put it in a small bucket or tub just enough for your hand and a little room to fit in. Put it close by to you.

Now, Put your hand between the two sandwich bags you rubber banded together and put in the bigger sandwich bag. Rubber band the opening of the bigger bag to your wrist (this is so it doesn't fall off). You have made a nice polar bear glove!

Put your hand without the glove in the water. Take it out, wipe it on the towel so it isn't so cold, and put your hand with the glove in the water. Is there something different? Put them in together and see if you notice then.

### What happened?

Since shortening is a type of fat, it acts just like polar bear blubber. Polar bears have about four inches of blubber around their whole body which helps to keep them warm in the cold arctic.

When you put your bare hand in the water, it was really cold, wasn't it? This is because we don't have that blubber to keep us warm. When you put the hand with the polar bear glove on, you couldn't feel the cold water, just like a polar bear!