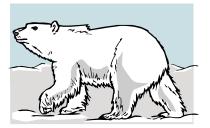


THE BLUBBER GLOVE



Here's an activity that lets you find out for yourself how whales, seals and penguins all manage to stay warm in the cold. It's gross, but it works...

You will need:

- * Three waterproof, zipping plastic baggies, big enough to surround your entire hand.
- * Parcel tape
- * A big bowl of ice and water good and ch-ch-chilly
- * A few packs of solid vegetable fat, at room temperature
- * A spoon (unless you really want to get your hands dirty!)

What to do:

1. Fill one baggie with vegetable fat. Mmmmmn - nice!

2. Turn another baggie inside out. Place this inside the baggie filled with fat so that the zipping sides of the two bags interlock.

3. As an added caution, seal the tops of the baggies together with parcel tape leaving the inner bag open so you put your hand in it. You've now made your blubber glove.

4. Put one hand inside the blubber glove. Squish and smoosh the fat around as necessary to spread it evenly between the baggies.

5. Put your other hand inside an empty, single baggie. Now dip both hands into the icy water. Which one do you have to pull out first? Don't leave either in there too long as they will start to hurt!

What's going on?

You should notice that you can keep your blubber-gloved hand in the bowl of ice much longer than the hand protected only by the plastic bags. This is because the fat acts as an insulator, keeping the heat inside and not letting it pass through to the icy water. In the wild, many sea animals have a thick layer of blubber to protect them from the cold.