

The **BLUBBER** Glove Experiment

1. Fill a water pitcher with ice water.
2. Scoop about 2 cups of shortening into a plastic bag.
3. Place the second plastic bag inside the first.
4. Use your hands to spread a thin, even layer of shortening between the two bags.
5. Fold the top edge of the inner plastic bag over, so it lies flat against the outer bag.
6. Seal the bags together with a piece of tape.
7. Using a timer, see how long you can stand to keep your bare hand submerged in the ice water.
8. Place your opposite hand inside the plastic bag and use the timer to see how long you can keep your blubber-covered hand submerged in the ice water. Be careful not to let water get into the top of the bag.



Items Needed:

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| 2 plastic bags | Spoon | Water |
| Strong tape | Water pitcher | Timer |
| 2 cups shortening | Ice | |

Follow Up Questions:

1. Why do marine mammals swim in icy cold water?
2. What would happen to animals that swim in cold water if they did not have an insulating layer of blubber?
3. Unlike seals, whales, and polar bears, people don't have a layer of blubber to keep them warm. What strategies do humans use to keep their bodies insulated during the winter?