

# Blubber Glove



## STEM

**Blubber** is a thick layer of fat found under the skin of all marine mammals. Blubber covers the entire body of animals such as seals, whales, and walruses (except for their fins, flippers, and flukes).

Mammals like humans and marine mammals are warm-blooded, meaning our body temperature stays about the same no matter what the temperature outside is. Blubber stores energy, helps marine mammals float, and keep them warm in icy waters. Right whales have some of the thickest blubber and so can be found in the coldest places on earth - the Arctic and Antarctic regions. In these animals, blubber is more than a foot thick!

**Now it's your turn!** Create your own insulating blubber glove and experiment with some new ways to stay warm!

### Materials:

- A bucket filled with cold water and ice
- 2 larger (1 Gallon) Ziploc bags
- Shortening
- Duct tape
- Other types of gloves (disposal glove, cloth glove, feather glove, fur glove, etc.)

### Directions:

1. Fill your bucket with cold water and ice. This will represent the chilly waters of the Arctic Ocean!
2. Using one of the Ziploc bags, fill it with 3-4 large spoonfuls of shortening.
3. Place your hand in the second Ziploc bag and push it into the shortening-filled bag.
4. Spread the shortening around the plastic bags until the inner bag is covered.
5. Fold the top of the inner bag over the top of the outer bag and duct tape it down. Make sure all shortening stays between the bags.
6. Now it's time to test!
  - a. First, briefly feel the water with your bare hands. How does it feel?
  - b. Try testing your different gloves in the water (empty glove, cloth glove, blubber glove)
  - c. Which glove keeps your hand the warmest?



Photo: stevespanglerscience

