

Blubber Gloves Experiment

Explore how blubber keeps animals warm in cold water!

Blubber is the thick layer of fat under the skin of marine mammals such as whales, seals, and walrus. It keeps them warm and provides energy.

Materials Needed:

Large container of water, vegetable shortening, spatula or large spoon, Ziploc bag, disposable gloves*, towels. Optional: stopwatch.

*You can use a second Ziploc bag instead of disposable gloves, if desired.

Instructions:

Caution: This activity can be messy!

Step 1: Fill a container about halfway with cold water.

If available, add ice to make it extra cold! Make sure the container is large enough to put both hands in.

Step 2: Scoop several spoonfuls of shortening into a Ziploc bag. The shortening will insulate your hands, like blubber.

Step 3: Put a disposable glove on one hand, and then put your hand in the Ziploc bag. Squish the shortening around so it covers the glove fairly evenly.

Step 4: Put a disposable glove on your other hand. To make it easier, ask a friend to help you pull the glove on.

Step 5: Put both hands in the water container. Be careful not to let the water splash over the sides! Which hand gets colder first? How long can you keep each hand in the water?

Try This: Use a stopwatch to count how long it takes for your hand to feel cold (but not numb).

Blubber and Marine Mammals

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