

Indoor Activity: Blubber Experiment

Animals that live in extreme environments have special adaptations so they can live in those areas. When it comes to temperatures, animals like birds tend to migrate to warmer climates when the weather gets cold. But how do animals stay in cold weather all year long? Some animals have developed blubber, which is a thick layer of tissue under the skin that helps keep animals from getting cold. In this experiment, you will create your own blubber using a plastic bag, shortening, and ice water. This experiment will give you a better idea of how blubber keeps animals warm

Benefits

- ♦ Experience an adaptation
- ♦ Fun for all ages
- ♦ Learn how useful blubber is for animals.

Supplies

- ♦ A large container of ice water
- ♦ Shortening (like Crisco)
- ♦ 4 plastic storage bags
- ♦ A Timer
- ♦ A Thermometer
- ♦ A Hand Towel
- ♦ Hand soap



What to do

- Turn one of the plastic bags inside out and place it inside the other bag.
- Fill the space between the two bags with a thick layer of shortening or Vaseline, then zip the two edges of the bags together.
- Make a “control” glove by putting the other two plastic bags inside each other. This gives you the same amount of plastic without any blubber.
- Fill a large container with ice water. Make sure its deep enough to submerge your hand.
- Use the thermometer to gauge how cold the water is.
- Put the “control” glove on your hand and submerge it in the water. See how long you can keep your hand there safely and record the time using a timer.
- Put the blubber glove on and put it back in the cold water, record how much longer you will be able to keep your hand in the water using a timer.

Outdoor Activity: Visit a Zoo or Research your Favorite Animals

A great way to experience animal adaptations is to visit your local zoo or aquarium. The animals they have on exhibit will be accompanied with educational materials that detail some of the cool ways those animals are adapted to their environment. With it being January, it may be too cold to visit the zoo. So, if the temperature is too low, you can research your favorite animals online! Whatever your favorite animal is, they are adapted in some way or another to thrive in their environment.

Additional Supplies (Optional)

- Camera to take pictures
- A Notebook to take notes
- An internet connection
- Coat & gloves in case of inclement weather

