

# sea ice EXPERIMENTS

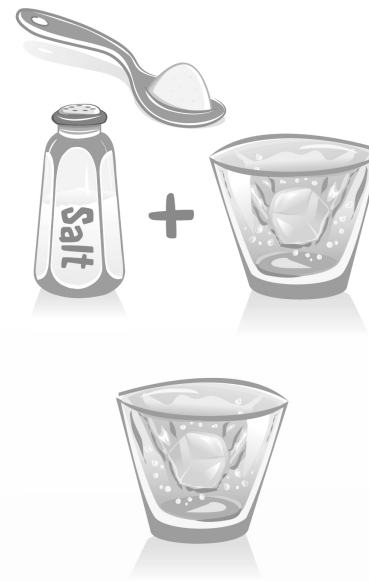
Polar bears hunt on sea ice. Sea ice is ice that forms on top of the ocean during the late fall, winter and spring. Seals make holes in this ice so they can come out of the water to breathe. When they do, a hungry polar bear may be waiting. Polar bears need sea ice so they can find enough food for themselves and their young.

To learn more about ice, try these cool experiments.



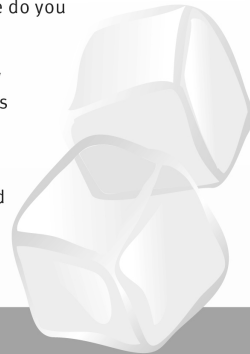
## LAND ICE VS. SEA ICE

- 1 Gather two ice cubes, a cup and a bowl.
- 2 Place one ice cube in an empty bowl; place another in a cup of water.
- 3 Set the bowl and cup next to each other and make a prediction: which ice cube do you think will melt faster?
- 4 Check on your ice cubes every few minutes to see what happens. Was your prediction correct?
- 5 Try your experiment again but change things up. Try a cup of warm water vs. cold water. Try putting the plate in the sun vs. the shade. Why do you think one ice cube melts faster than the other in these experiments?



## SALT WATER VS. FRESH WATER

- 1 Gather two ice cubes, two cups, a tablespoon and a measuring cup.
- 2 Make some salt water (like the ocean) by adding 1 tablespoon of salt to 1 cup of water in one of the cups.
- 3 Put 1 cup of fresh water in the second cup.
- 4 Place an ice cube in each cup.
- 5 Make a prediction: which ice cube do you think will melt faster?
- 6 Check on your ice cubes every few minutes to see what happens. Was your prediction correct?
- 7 Do the entire experiment again, but this time, put one drop of food coloring on each ice cube in the cup and watch what happens.



## Know Your Polar Ice!

### Sea Ice:

Ice that forms on the surface of the ocean. There is water underneath sea ice.

### Land Ice:

Ice that forms on land—like in Alaska, Greenland and Antarctica.

### Ice Shelf:

Sea ice that is connected to land ice.

### Glacier:

Ice that has formed from many of years of snowfall piling up and compacting.

### Iceberg:

Chunk of ice that floats in the ocean, usually formed when pieces of glaciers or ice shelves break off.

**Did you know?** Alaska Native communities have a deep understanding of sea ice because, just like the polar bear, they need it to hunt for food. The Yupik people of St. Lawrence Island have described almost 100 different types of ice formations!

