

Keep this sheet.
Collect them all!



Explore your world with this Science-to-Go backpack



Books in this backpack

- **Extreme Oceans**
by Seymour Simon
- **The Great Bear Sea: Exploring the Marine Life of a Pacific Paradise**
by Ian McAllister and Nicholas Read
- **Neighborhood Sharks: Hunting with the Great Whites of California's Farallon Islands**
by Katherine Roy
- **Ocean Sunlight: How Tiny Plants Feed the Seas**
by Molly Bang and Penny Chisholm
- **Shimmer and Splash: The Sparkling World of Sea Life**
by Jim Arnosky

Idea!

Some nonfiction books aren't meant to be read from beginning to end. Try skimming one of the books to find the sections you most want to read.

More books
at your
library

Alien Deep. Bradley Hague. J551.23
City Fish, Country Fish. Mary Cerullo. J597.1778
Coral Reefs. Jason Chin. E577.789
Orca Chief. Robert Budd. NW J398.2097
Waves: From Surfing to Tsunamis. Drew Kampion. J551.463

Local Connection

Visit the **Foss Waterway Seaport** in Tacoma for a dose of local maritime history. Find more information at fosswaterwayseaport.org.

ACTIVITY

Winter Freeze

You're welcome to keep this sheet!

On very cold winter days you may notice frozen puddles and ponds. But have you ever seen Puget Sound ice over? Of course not! Discover more about the phenomenon in this simple exploration.

What you need:

- 2 small cups
- 1 tsp salt
- 2/3 cup cold water
- Marker or pen
- Freezer

Try this:

1. Label one cup “fresh water” and the other cup “salt water.”
2. Measure 1/3 cup of water into each cup.
3. Add the salt to the appropriate cup.
4. Place both cups on a flat surface of the freezer. Leave them alone for a little more than an hour.
5. Make a prediction: Will both cups get icy?
6. Check cups for ice. Chances are that the fresh water changed to ice, at least on top (like the top of a frozen puddle). Plain water freezes at 32 degrees, but salt water needs much colder temperatures to form ice, so the salt water cup is likely cloudy and unfrozen—unless you have a super-cold freezer!
7. Remember that Puget Sound is part of the Pacific Ocean. Does it make sense that it doesn't get icy in the wintertime?

Going Further

Can you think of other ways that salt water acts differently than fresh water? Try floating an egg in both fresh and salt water. Are you surprised by what happens?